

# WINNING VOLLEYBALL





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Canadian Volleyball Association

Original Japanese edition published and  
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CANADIAN VOLLEYBALL ASSOCIATION  
333 River Road, Vanier, Ontario  
Canada K1L 8B9

First Printing  
December 1977

ISBN 0-920412-00-3

Printed in Canada  
By  
Dollco Printing Ltd.



## PREFACE

This book came to press through the efforts of Victor Lindal and the British Columbia Volleyball Association. Victor Lindal was able to persuade Takaiku Kikuchi to translate this book into English. It was because of the efforts of these two people and others such as Ian Stoddart, Executive Director of the Canadian Volleyball Association that this book became a reality.

The insights offered by Yusutaka Matsudaira, Naohiro Ikeda and Masaru Saito are unique to the world of volleyball. These coaches, the eventual winners of a gold medal in the 1972 Munich Olympic Games for Men, have revolutionized the sport of volleyball. Their new techniques, tactics and training methods have been adopted as fundamental volleyball in every country of the world today. This exceptional book gives the volleyball enthusiast the method of their achievement.

Ikeda was the tactician, Saito was the training specialist and Matsudaira was the connoisseur and master of the whole process. Beginning in 1961 Matsudaira began the program that was eventually going to make them the Men's Olympic Champions in 1972. Ikeda taught the techniques to the players that included Matsudaira's new tactics for quick combination attack. This attacking system allowed no time for the opposition to set a perfect block or correct a court defense. In addition, to offense "Matsudaira's flying circus", as it was called, changed the defensive style of play as well. These offensive and defensive tactics resulted in many people becoming fans and students of the Japanese style of play. This was not possible until Saito trained the players to a razor's edge by combining gymnastics to their normal volleyball training. This too, in the beginning, shocked the volleyball cosmos but soon became part and parcel of a fresh and novel method.

All three coaches retired after the 1972 Olympics. However, their efforts and contributions continue to live on. Although adopted, changed, and modified by many countries, the Japanese method of volleyball continues to impress coaches, players and spectators alike. This book will give the reader an insight into international competition and international volleyball as seen by the Japanese. Who knows you may have a dream like Matsudaira and also have it come true. Matsudaira said:

*"Players will not follow coaches who only say, 'let's win'. The coach must have a philosophy of the reason to win. He must always speak with the players concerning the reasons why. Our goal was not necessarily to win a medal but the process necessary to winning a medal. Unless a clear goal is set, the process cannot be achieved with the full energies of all people involved. The striving for victory is more important than the victory itself, but you cannot strive for victory without establishing victory as the goal."*

Dr. L. Sawula  
Editor



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# Volleyball for Victory

## To Win the World Championship

At the men's volleyball matches you find more than ten thousand spectators inspiring the players with every serve and applauding every fine play. That means they greatly appreciate the effort we have made for eight years. Though some criticize, they are just like the fans who scream at the rock concerts.

## We cannot win with common theory

When I was appointed coach of the All-Japan Men's team just after the Tokyo Olympics, I decided that we would be the champions of the world. I knew that my job was enormous. However, to make my nation victorious was a challenge. My idea seemed to be nonsense, that is why many people thought it impossible to win the championship of the world at that time.

In the spring of 1965 I was mocked and ridiculed to such an extent that I lost my common sense and actually began to doubt my sanity. We cannot win with common sense. I made up my mind to carry out my plan beyond common sense. That is, it was necessary for me to organize everything in a new way; how to select players, how to train them, and how to carry out my plan within the Japan Volleyball Association. My first task was to make the Japan Volleyball Association believe in me. Fortunately, many people, as well as the Japan Volleyball Association, had trust in the validity of my plan for the eight years.

Now we are one of the top two in the world. (Editor's note: This was written before the Gold medal in 1972). When I hear the fans yell at the gymnasium, after the eight years' effort, it seems to me to be proof that we have tried to change "impossibility" into "possibility". Men's volleyball is now, not what it was.

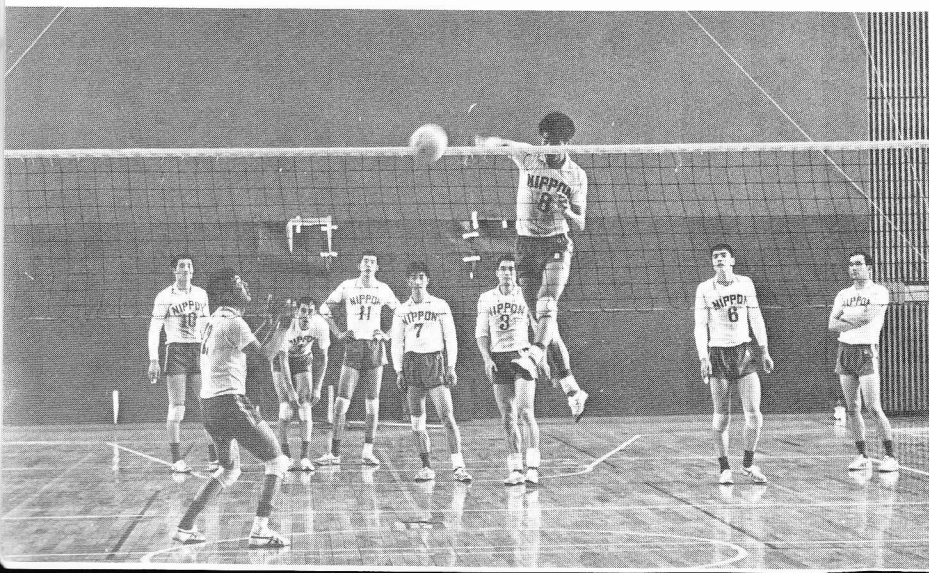
## To Win at the Munich Olympics

In 1965, an eight year plan was developed. The major focus in this plan was a Gold medal in the 1972 Olympic Games. We started to organize a new team that required the full dedication of our coach, assistant coach, trainer and players. I began to select players with confidence: "I find potential with my eyes, pick them with my decision, improve them with my hands and then build the team to my design". Our dedication needed to be so intense that our team would be spiritually welded together as one.

My method in building the national team was surely beyond general volleyball theory. In this case, it is common to select about thirty (30) candidates for the national team first, and then pick out the top 20 from them at the try-out camp and finally decide on the 12 national players. I ignored this approach. First, I picked up a few players who I thought were most suitable for the team. They were the core of the national team. Players around the core came over one by one, again selected by me. My method was directly opposite to the common Japanese system of national team selection. The core consisted of three players, Ikeda, Minami and Nekota. Next came Shirakami, Kimura, Koizumi, and Mitsumori who joined us in 1965, Morita and Yokota in 1966, Oka, Sato and Shimaoka in 1967.

These twelve players won the Silver Medal at the Mexico Olympic Games. After Mexico, Nakamura and Fukao came to us in 1970, Numakura, Noguchi and Kobayashi in 1971, Nishimota and Maruyama in 1972, Shirakami, Kimura and Koizumi left the team. I could finally select all the players for the national team of the Munich Olympic Games.

These players were selected by me because I saw their potential and knew that with training they would improve to the Olympic level. With the training we developed each player to highlight his specialty, for example, diggers, quick hitters, high



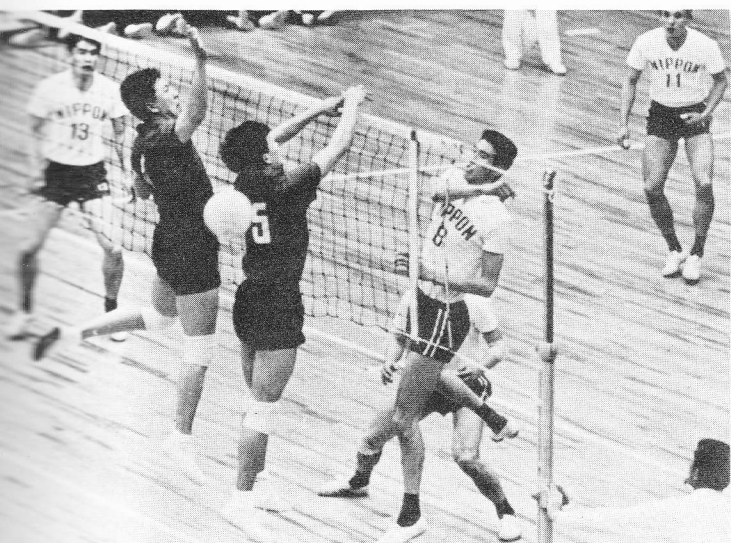
Practice of the Japan National Men's Team. Teammates are observing Morita's spiking.

outside hitters, etc. During my selection of players, I was thinking of the coaching staff. Finally I decided that Mr. Ikeda should be an assistant coach and Mr. Saito a trainer. The three of us shared jobs and responsibilities and were close friends. We were all dedicated to the team.

Ikeda, who was captain of the Mexico Olympic team, specialized in coaching the spikers. Saito trained players physically with his new methods. They both made a big contribution to our team.



Ikeda (left) and Nekoda (No. 10) in the match Japan East vs West, 1966.



Minami (8) and Nakamura (13) in the match with China, 1966.

## Everyone in the World knew Minami

Masayuki Minami, who entered the Asahikasei Co. just after his graduation from Ohori Senior High School in 1960, became a National player when we made our first ever National men's team tour of Europe in 1961. During the tour we lost miserably in all 22 games. In many cases our opponents were not National teams, but club teams.

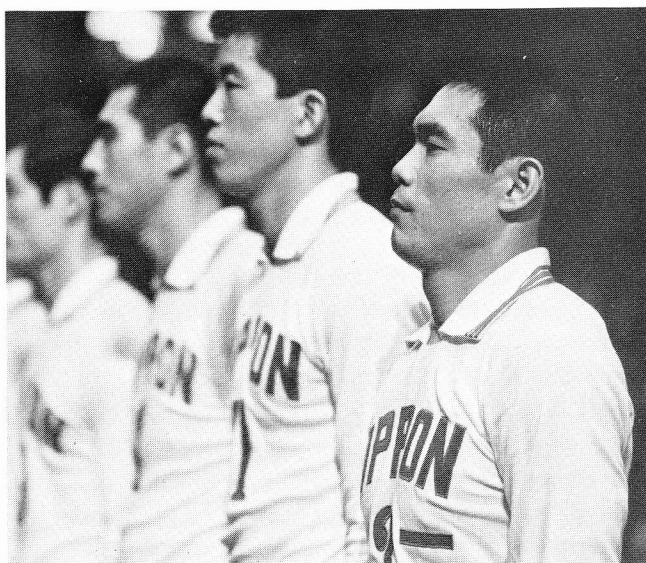
The results predicted a dark future for men's volleyball in Japan. Minami was the only player who had experienced such miserable results. He was the tallest on our team at 1.96 metres and a starting member in the World Championships in 1962. At the Tokyo Olympics his spiking was so skillful and destructive that he was well respected by every player in the world. Minami was confined to bed with a lung infection after the Tokyo Olympics. He came back to the Olympic team like a phoenix, just before the Mexico Olympic Games. He was not able to be a starting player any more. During his absence, younger players Morita, Kimura and Koizumi were much improved. They were able to play better in his position.

When he entered the game as a substitute the opponents would focus on him. Anytime he jumped for a spike, the opposing players who knew his spiking ability jumped to block him. Therefore, younger players were able to spike easily and effectively. The former "Ace" spiker of the All Japan Men's Team tried to lead the opposing players into a trap. He might enter the game only when we were in trouble, then as a middle spiker and the tallest setter in the world. Once in the game, all the front row players on the opposing side would focus all their attention on him. When we were on the verge of losing, he rendered distinguished service for the team as a substitute. During the semi-final match in the Munich Olympic Games, he helped us overcome Bulgaria. We narrowly won in five games, with the fifth game score 16 - 14.

## Great Leader and Captain Nakamura

He entered the Shinnipon Seitetsu Co. after his graduation from senior high school in 1961. He was selected for the national team in 1962 and was one of the players in the Tokyo Olympic Games. After the World Championships in 1966 he retired from the National team. I later persuaded him to come back to the National team. I know that he had strong personality characteristics that we needed. He had fighting spirit, mental power and a very strong will. He was appointed captain in 1971, replacing Minami. Nakamura was different from captains of other teams. He rarely played in the





Nakamura, captain.

matches. He led the players during practice but not during the matches. During a match we do our best to show all the things that we have developed as a result of our practice. Therefore, I think it is more important for the captain to lead the players during practice then during the match. I have never seen a stronger practice leader in my life. He was also good at quick spiking, blocking and drive serving. I recognized that he would be a very important member of our Olympic team.

As I expected, my two veteran players Nakamura and Minami came through when we needed them in that crucial match against Bulgaria. These two showed how important it is to have experienced players during tight matches.

### **Volleyball for Victory**

There are five major elements which are used to evaluate teams. These elements usually determine the final result of a volleyball contest.

1. Physical strength
2. Mental power
3. Tactics and Technique
4. Team work and Co-operation
5. Experience

Every item is essential for a team. If we want to win the World Championship, then our team would be the best at three and better at two of the above elements. This was our goal during the training following the Tokyo Olympics.

I would like now to elaborate on the five major elements of a volleyball match.

### **Physical Strength (physique, athletic ability)**

When we compete against other countries, our biggest weakness is lack of physical strength and power. The players in the other countries are generally much stronger than Japanese players. After losing to foreign countries, our coaches always come to the same conclusion that our players need to have greater strength, power and endurance. I think this has been the cause for Japan's defeat in many sports played internationally.

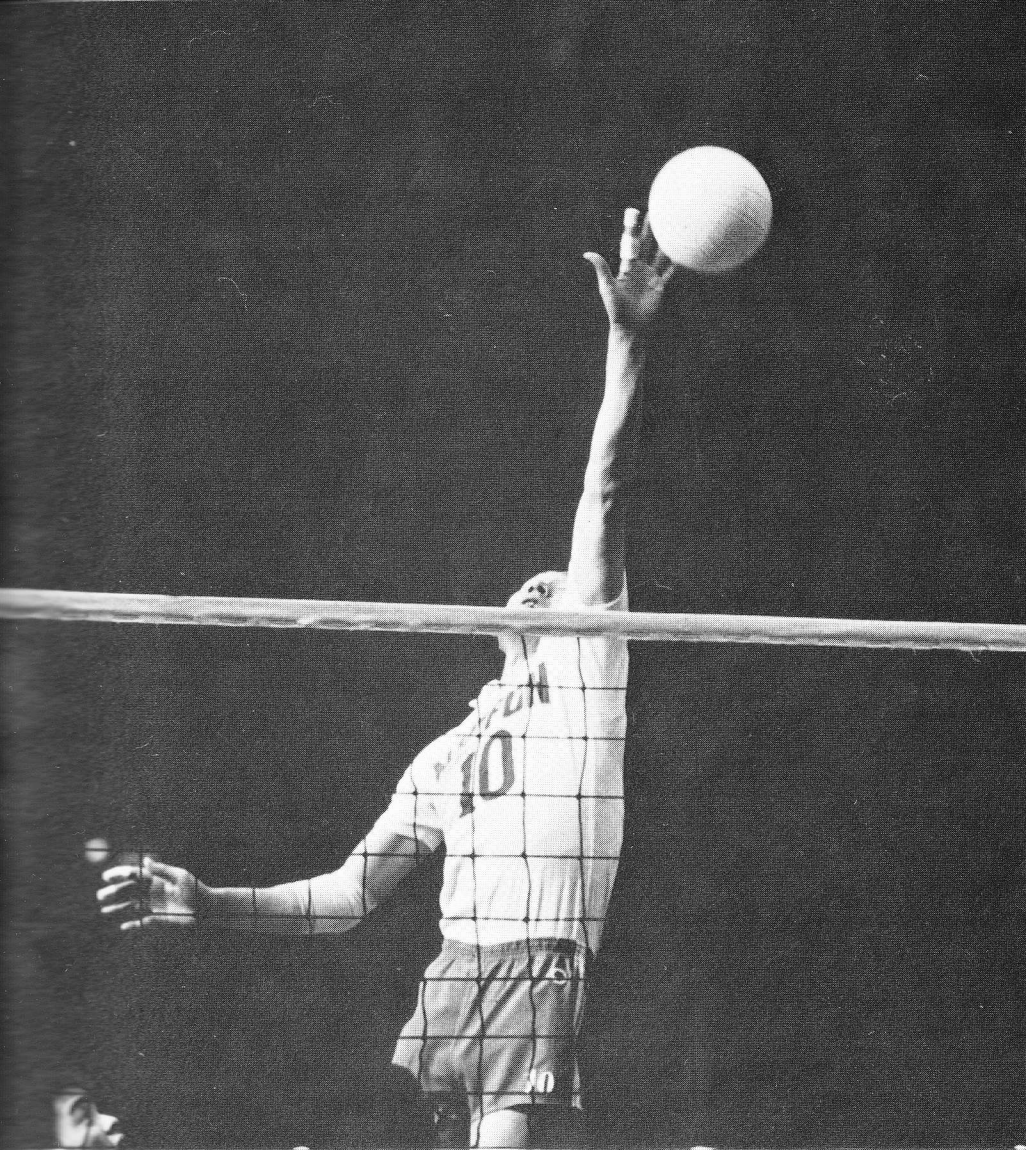
With this in mind, I decided to build the physical strength of our players. Now we would not be able to say that we lost the match because we lacked physical conditioning. In order to achieve victory, it was mandatory that we find big players and develop the team using these big players. We decided not to select the average sized Japanese players, but rather to select the bigger boys who seemed by our standards, to have been born as a mutation. The tall Japanese players were very difficult to find. These tall boys were looked upon as really "good for nothing" with very little athletic talent or potential.

We selected big boys and then trained them mentally and physically. Our aim was to make them good athletes. Through the efforts of Saito as the trainer, these tall players became good at acrobatics and very co-ordinated volleyball athletes. It was a first and epoch-making, that the All-Japan Men's team was successful in improving tall players with Saito's theory and methods of physical training. They, who had been called big, "good for nothing fellows", could now dance like butterflies and jump like grasshoppers.

Now all of our players looked fresh at the end of the match, whereas in the past the signs of fatigue were very visible after a tough five-game match. This showed us that we were successful in our aim to develop the physical prowess of our athletes. Now when we reflected on a match, we could do so without commenting on our fatigue or poor muscle power.

### **Mental Power (immediate and long enduring)**

Mental Power is derived from hard training at practice and from matches. Through the effort of the players in trying to realize goals, their mental power can be improved. After they realized one goal, I then suggested that they should have an even higher aim than before. For example, if we had been satisfied with a Silver Medal in the Mexico Olympics, we would never have won the Gold Medal in the Mexico Olympics, we would never have won the Gold Medal in Munich. We achieved our purpose in Mexico. We were never satisfied



A tip shot by Oko.

with the second place. We had a higher purpose or goal, that was the Gold Medal in Munich.

Mental power can be improved with concentration and maintained with pressure during practice and games. Hard training or self discipline is meaningful only when players are doing it because they want to. mental power must come from within each player. Therefore, I used to suggest and demand that each player have his own target for the future and that we should raise the goal of the team ever higher and higher.

People sometimes felt that my goals might be too high for players. They sometimes criticized me for this! "Matsduaira has a big mouth", was the expression often heard from my detractors. Even if the goals were too high for them, who could deny the fact that the goal encouraged them to train harder and brought their mental attitude up when they worked hard to try to achieve it? We always need newer and higher purposes for the team to improve our mental power.



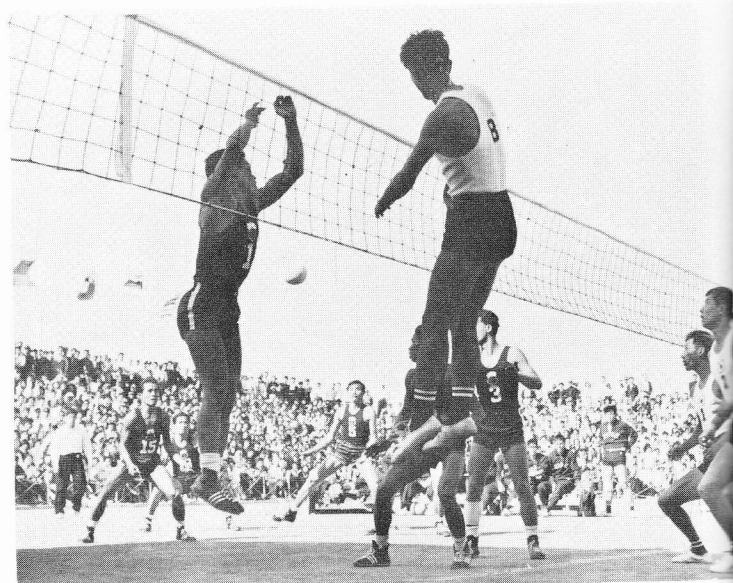
## Tactics and Techniques (strategy and individual skills)

- a) To create new tactics and techniques of our own;

In the beginning, we had to send our coaches and players to the Soviet Union and invite coaches from Czechoslovakia in order to learn and to import the tactics and techniques from the advanced countries. I thought however, we would never beat them while we learned and imported from the advanced countries. I thought that our next stage of development would come when we could export our ideas on techniques and tactics. This would be the only way that we could win. At this point, we started to create originality on our Japanese Men's team.

- b) To respect the traditional tactics and techniques of the 9 man volleyball system:

We have the 9 man system of volleyball which has a long history in Japan. The traditional tactics and techniques are original in Japan. First I thought that we might organize and create new tactics and techniques for the 6 man system of volleyball with modifications on the 9 man volleyball system. I don't deny that I have been criticized: "Matsudaira pretends to have created new tactics when it is only an imitation of the 9 man system". Yes, it is true that my idea came from the 9 man system. I imitated and modified the tactics and techniques of the 9 man system. I created and organized new ones available for the 6 man system.



Tradition of the 9 man system volleyball. (The match against the Phillipines in the 1958 Asian Games.)

There is a great difference between the six man system and the nine man system. The team of nine consists of specialists whose positions are fixed, while that of the six people has all-round players who have to rotate every change of serve. Though there are some resemblances between both, they are essentially different.

Suppose that no one has created anything new without initiating and modifying existing things in the history of man, you will find it necessary for us to imitate something first in order to create something new. Therefore, we should have courage to adopt what is needed, without being worried about criticism.

### Team Work (sharing a common mission or goal)

When players of the National team are selected and they don't have a common goal then they are almost the same as a disorderly crowd because they don't have team work. Such a team cannot beat others. If they want to defeat others, they must share the common mission and goal of the National team. Their drive to achieve these high goals must be greater than their drive when playing on their club teams. Therefore, I had to organize a way to make each of them have team spirit immediately.

To make the supreme effort for a common goal, there are two important elements of good team work:

- I. To establish a clear goal shared by all players and coaches,



Diving reception by Morita:—Attacker with offense techniques only cannot play the 6 man system volleyball.

## II. To give each player and staff member clearly defined functions.

Team work can supremely be displaced when men are at the depths of despair. For example, two soldiers, one from North Vietnam and one from South Vietnam, who are accidentally thrown into the ocean in the same boat, will never kill each other. But, they will do their best to remedy their desperate situation with co-operation.

When they wish to be alive, there is no hatred or border between them, only co-operation. Such co-operation should be the ideal of "Team Work". However, it is much easier for us than it was for the two soldiers. When we compare our earnest wish to be World Champions, to their wish to be alive, we find our goal easier than theirs. Accordingly, my desire was to create in practice the same feeling of desperation as found in those two soldiers. We tried to practice as hard as possible in order that we might come closer to their condition.

I used to say to the players, "We can live only once in our life. The possibility for us to be the world champions comes only once in our lives. If we do not make good use of this opportunity, it may never come again before you die. Therefore, we must do

our best to achieve our purpose, clenching our teeth". This is what I encouraged in them.

In other words, if we expect something utilitarian when we play on the national team, the mental power or fighting spirit never comes to them. For example, if they expect reputation, money and something available for their business, as national players, we cannot have good team work any more. We have to think that the most valuable thing is to work hard in our life. We can get good team work only when they think volleyball is our life.

### **The Players are Required to be Proud of Themselves:**

If we have players on the team who are selected by the coaches but who do not feel a deep desire to be on the team, then we can not have good teamwork. This means that the most important thing is for every player to personally feel a commitment to the team, not just as a selection to the team. Players must think that the purpose of the team would not be achieved if they were not on it. The National team should be a group which consists of players who are proud of their ability and themselves as National players. I am sure the ideal team work consists of 70% "dry" and logical relationships between us and 30% "wet" and emotional relationships. The strong foundation of the National





Men devoted to volleyball.

team will only be built when the two important areas of mental attitude mentioned above have been realized.

### **Experience (Major Domestic and International Experience)**

The average age suitable for volleyball players is older than in other sports. It is said that the average age of volleyball and soccer players is older than any other sport. The average age of the Soviet Union team was 29 years old when they won in the Mexico Olympic Games. D.D.R. was 29 years old when they won the World Cup. You can see that volleyball requires experienced players who can maintain their physical strength and techniques.

### **Players are Improved During an Exhibition Tour to Foreign Countries:**

Even when we were in financial difficulties, we used to go on a tour once or twice in a year, in order to gain experience at international competition. I have had to go through difficulties to build the fund for the expedition. I used to emphasize that we would be ten years behind foreign countries if we were neglectful of the foreign tours, or only at the most went once a year.

Fortunately, I was one of the executives of the JVA (Vice Chief of Executive Directors and Chairman of the Improvement Committee) and was very influential regarding the budget of the JVA. We were able to get enough money to travel for the tours every year. We eventually travelled to foreign countries three times in a year. I dare say that the trips to foreign countries developed the prosperous and successful men's volleyball in Japan.

We were successful in bringing up one of two good players every tour. For example, Kimura and Koizumi at the World Cup in 1965, Morita at the

World Championships in 1966, Yokota at the Asian Zone Championship in 1966, Oko on the tour to Europe in 1967, Shimaoka at the Mexico Olympic Games in 1968, Sato in 1969 and Fukao in 1970.

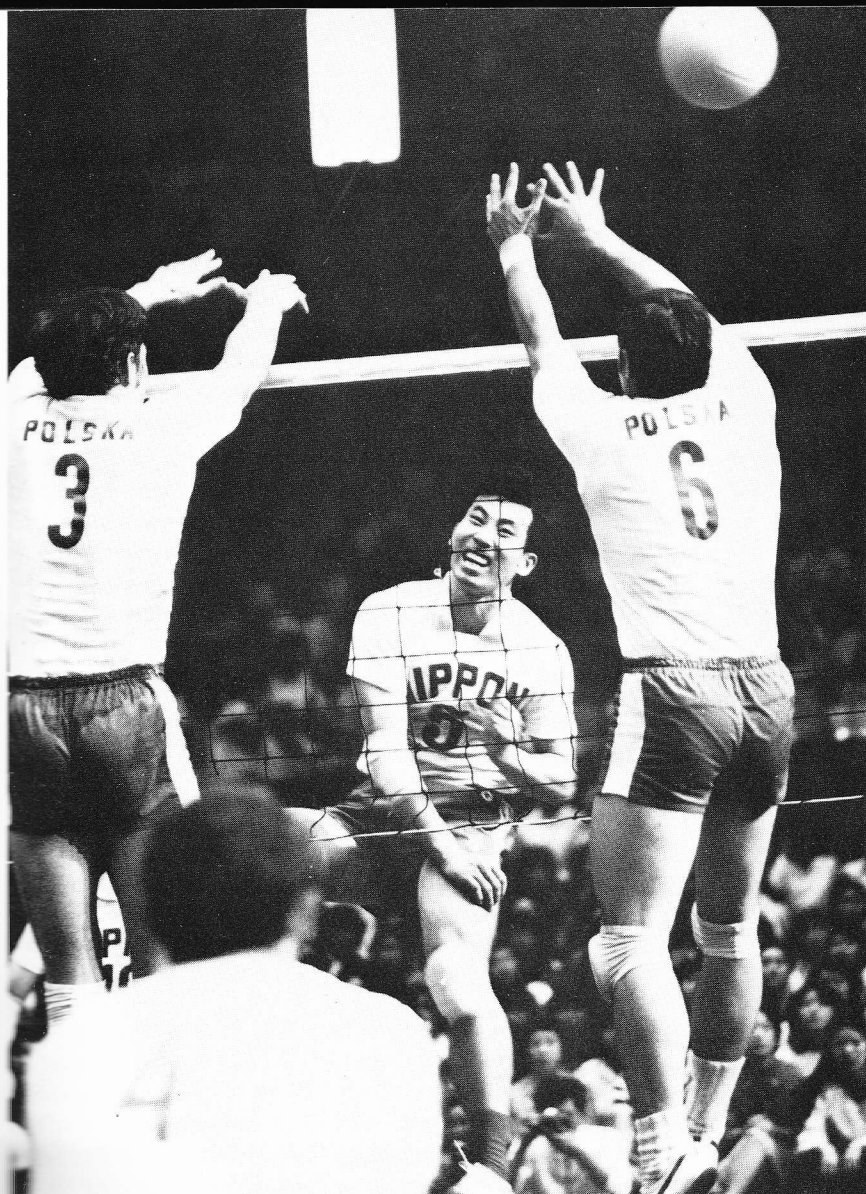
They improved tremendously with the experience gained in the foreign tours. You can see how very important the experience was for them, to be good players. Thus we developed players good enough to beat the foreign teams. Next I enthusiastically tried to organize a better environment for their practice, free of any troubles. It was very hard for them to practice from morning until evening. They had their families and their jobs. It was very important that the people understand our situation regarding practice time and financial difficulties. Many people thought we were crazy but we needed their support in order to have a successful programme. Therefore, my job was mainly to create a good environment for the players.

### **The Background of Guerilla Tactics**

I had gradually improved each of the five elements for victory. It took eight years to achieve our goal. The plan to achieve our goal had extended over a long time. We needed to beware of being too eager for success so we asked the people surrounding us not to judge and criticize our methods too early. The mass media became a big weapon in helping me explain my ideas and philosophies to the people. This helped to counteract the negative criticism. During that time we didn't always continue to practice. We often had international competitions. We didn't have power enough to beat the foreign teams. Therefore we needed the guerilla tactics to beat them at the Mexico Olympic Games. We did there, as an old Japanese told us, "If your opponents' sword cuts your muscle, then you should return with your sword to cut his bone". (You should give back double what you get from your opponent). It was our aim to throw them into confusion with quick-combination attacking.

After the Olympics, Under, the coach of D.D.R., criticized and said, "Matsudaira must be crazy, I can't understand why he adopted a system with such a high percentage of errors".

I was well aware that our tactics had a high percentage of faults. That was the only way for us to beat them without any artillery (a powerful spiker), so we were not afraid of failure with our system. If we had been afraid to fail and had not used our tactics, we would have remained in 10th place. When I heard Mr. Under's criticism, I said to myself and laughed scornfully in my mind, "Who could really understand our aim?"



A quick attack by Kimura, a leader of the "guerilla" troop.

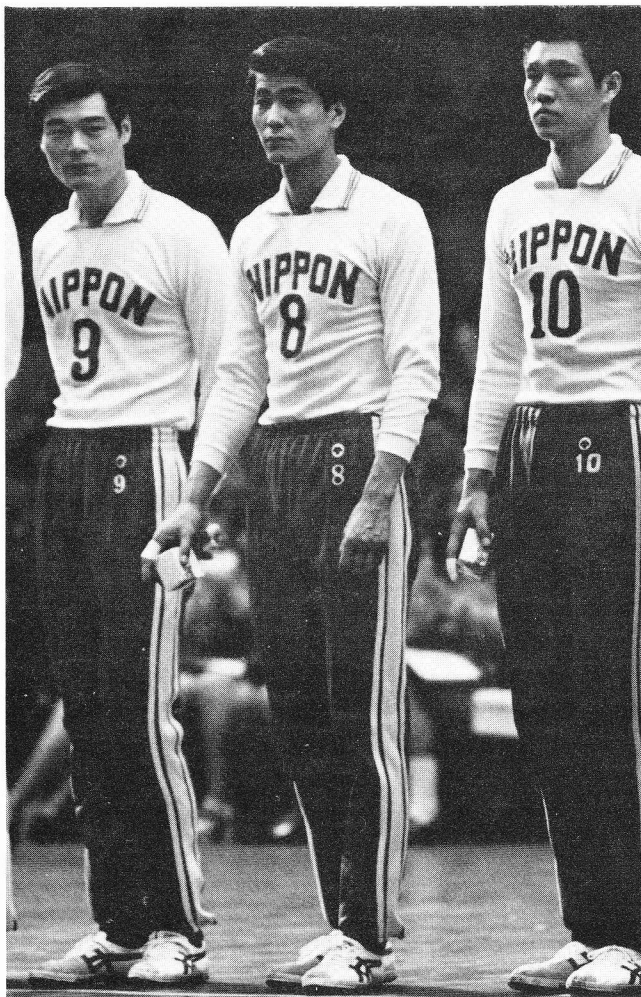
### **Coaches Should Develop Players who can Create for Themselves:**

Until the Mexico Olympic Games, the part played by the coaching staff and myself had been much greater than that of the players, regardless of winning or losing matches. But after the Mexico Olympic Games, the players had been the driving power to win. We on the coaching staff had trained them very hard, but they had created most of the things they needed in the games. Coaches should not teach and coach everything about volleyball to their players. The most important duty of coaching is to develop or educate players who can create something they need. Coaches can teach them up to a certain level. After that, players have to create ways to improve themselves. I don't think it is best for players to do perfectly as they have been taught by the coaches. They make great progress after they have been given a sound foundation by their coach. They should create a way to improve

themselves and make greater progress beyond what they have been taught. Coaches should be very happy to see their players creativity and greater progress. Furthermore, their coaches should be proud of their players.

When I became coach of the National team, I selected many freshmen, Morita, Yokota, Oko and so on, replacing veterans. These freshman were very poor at techniques, but I believed that they had potential and they would be great players. We lost matches very often with these young prospects. I was sure that we could win the World Championship when they were fully developed players. Their growth and improvement depended upon my coaching. Therefore, I gave careful consideration to them so that they would not be very disappointed in volleyball when we were beaten. When we were beaten badly, players were depressed and couldn't recover mentally.





The trio: Yokota (9), Morita (8), and Oko (10).

My biggest problem was to develop tactics that would prevent us from suffering a miserable defeat. I wished a reasonable defeat even though we were beaten. I used to say to myself and others after our defeat, "We are probably ranked fourth or fifth in the world. The difference in the power between the top ten is very close. The rank may be very changeable, depending upon the daily conditioning of teams. The fourth or fifth place in the world means that the Gold medal in the Munich Olympic Games is within our range. You can certainly look forward to the Gold medal since we have many young players with potential who are still poor and still we place within range of the Gold medal".

I tried very hard to organize a good environment for the men's National team. Fortunately many sports writers heard what I said and gave us good cooperation. The number of people who cheered for us and supported our team was increasing day by day. If I had been successful in the organization of a good environment, we could not have won the Gold medal, in other words, the national team would have fallen apart.

## **We Can Find the Path to Victory Even When We are in the Worst Environment**

Finally, I would like to tell you about the terrible environment in which we had been in for a long time. Very few people had any interest in men's volleyball and very many people mocked us. Many people had been thinking that men's volleyball should be subordinate to women's. Even when we won the bronze medal in the Tokyo Olympic Games, they criticized us and unfairly compared us with the women's national team who won the gold medal in Tokyo. I am sure that no team in the world, except the Japanese National Men's team would be criticized for the bronze medal in the Olympic Games.

Such an environment around us made us encourage ourselves, stimulate and rise to action. If we had never been in the worst environment, we would not have been stimulated as much, even though the coaching staff had tried hard to make us do so. Thanks to the worst environment, we have been successful in our purpose. I think, we should thank the environment we have been in.

There are few people who are called great in the world. When they are in a good environment, they always have the same tension, concentration and encouragement in their minds, as though they were in the worst environment or in a critical situation. Consequently, excellent coaches always have to organize the environment which creates repulsion, concentration, encouragement and stimulation to their players. They should not quickly make a shallow compromise with their players on the environment organized by the coaches. They should have a strong will. This is the most important ingredient for coaches.

## **We Have Been Looking for Something New in Volleyball.**

We have tried to create something new in volleyball for eight years. During the rapid progress of the volleyball level in the world, we have tried to improve the individual skills of the players, while at the same time we have had to create new tactics and strategy and enlarge upon them. I believe that we have been successful in our efforts during the eight years to create something new in volleyball. Every player has been able to create something new for himself and has gained much experience during the international matches.

The Munich Games will show the success or failure of my theory and philosophy of volleyball. We at first did not have a cannon on our National team, but now we have a big fleet with battleships, aircraft carriers and destroyers. We used to be

good at guerilla tactics like the Viet Cong, but now we will destructively beat other teams with a frontal attack in the Munich Olympic Games.

### **The Top Level Teams in the World**

Compared with the unique organization of the Japan men's national team, how have rival teams of the world organized their national teams? Players of the Soviet Union, East Germany and Czechoslovakia are trained on the club teams. Some of their excellent players are first selected for the second junior national team. The best of these players advance to the first junior national team. Finally, the best players from the junior national team are selected for the national team. This orthodox method of selecting players for the national team has been used in those three countries.

For example, in the Soviet Union, Chulak\* was selected for the national team in 1969 after he had played on the junior national team and Zaitsev\* and Selivanov\* were selected in 1971 after they had played on the junior national team. They practice and play with their own home club and attend domestic competitions. Therefore they don't have much time to practice on the National team. These three teams are at a disadvantage when it comes to beating other foreign teams. We should note that there are many veteran teams in the world.

Now every country had a tendency to follow the same method of organizing it's national team as we have done. That is to say, to organize the team family with the coaching staff as leaders.

### **The Soviet Union Men's National Team.**

Chesnokov\*, coach of the Soviet Men's national team, has called many prospects to his club team Cheska\*, in order to train them consistently.

Chesnokov, Coach of the Soviet Men's team and Fraer, assistant coach (on the left).



Chulak\*, Putiyatov , Domani\*, Zaiko\* and Bolsh\*, belonged to his club. They formed the core of the national team which is almost the same as the team family with Chesnokov\* as the leader.

### **Men's National Team — German Democratic Republic.**

Under\*, coach of the East German Men's National team, has selected all prospects in East Germany for the Reiptich\* club of his and has trained them there. Therefore, the national team consists of almost all his club players. It is called "Under\* Family". The Reiptich\* club equals the national team. That is why the East German National Men's team has suddenly appeared as one of the top level team in the world since the Mexico Olympic Games. I think Under's\* organization has been very successful.

Jenter, coach of D.D.R., talking with players during a time out.







Laznichka, coach of Caechoslovakia.

### **The Czechoslovakian Men's National Team.**

The National team in Czechoslovakia has many players from the strongest club, Bluno Spartak\*, who are Petlack\*, Schenk\*, Cordelk\*, Stancho\*, Leznichek\*, and so on. They have formed the core of the national team whose coach Laznitika\*, is also coach of the Bluno Spartak Club. He has selected excellent players in Czechoslovakia around the core and had organized a national team that is one of the top four in the world.

As stated above, the top level teams of the world have furiously competed with each other for the men's world championship and have had a tendency toward the permanent establishment of their national team.

# Coaching

(As an Assistant)  
Naohiro Ikeda

## Happiness of an Assistant Coach

The duty of an assistant coach is to help a head coach. There are two ways to help him; one is in the field of tactics and the other is in individual techniques. In my case, my duty is to improve techniques and skills of the players during practice, and to bring them up in order to win the World Championship.

When we coach all the players with the same methods on their techniques and skills, we often have various problems which come from the different personalities of the players. Success in coaching depends on what kind of method we take to solve the problem of individual differences. We can greatly improve one player with one method and spoil another with the same method.

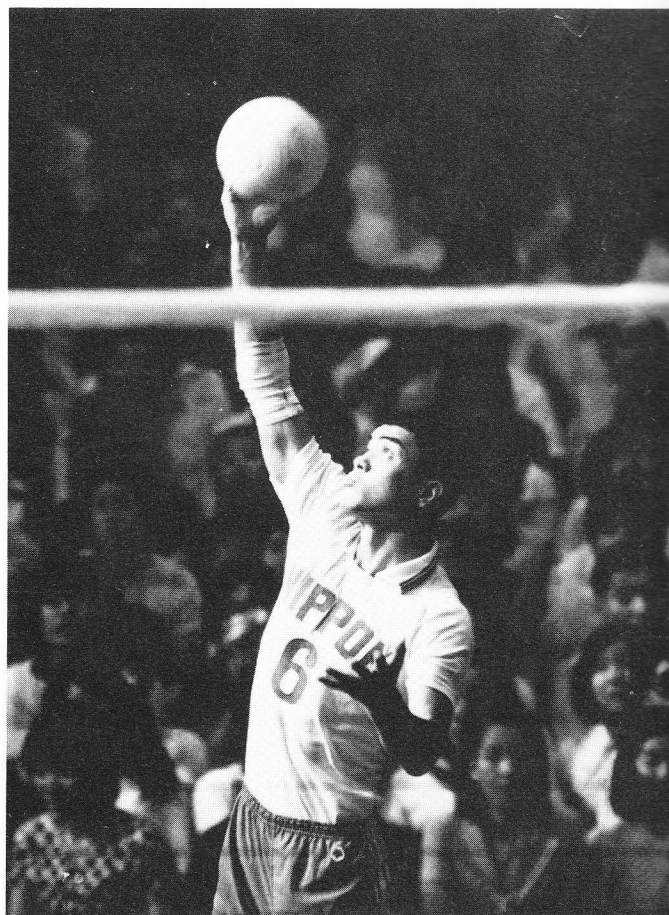
Therefore, the duty of an assistant coach is very important. We must have our own philosophy on coaching volleyball and make great effort to improve all the players. Accordingly, we are very happy to find players improving quickly with our coaching.

There is an example of my successful coaching method with Fukao, a national player, who played well in the Munich Olympic Games.

### **Patience: The Connection Between Coach and Player = The Case of Fukao:**

It was during the spring camp just before the World Championship in 1970 when Fukao came to the National team, in the place of Shirakami who had retired after the Silver medal in the Mexico Olympic Games. It was decided that I should be as assistant coach only, though I had been a playing coach in the Mexico Olympic Games.

The circumstances when Fukao was called to the National team were as follows: Mr. Matsudaira, head coach, called me, our trainer and all the players together and asked us who should be the national player to replace Shirakami. We all recommended Fukao who had been on the junior National team. All the players had said, "Fukao has a good personality. No one will try harder than Fukao to do his best with us to win the championship. Finally Mr. Matsudaira decided to call him to the National team, considering his future potential, his size at 1.94 cm, and his good basic skills, in addition to all our team agreement.



Fukao serving.

### **A Man of Weak Nerves — Fukao:**

In a year his physique was much improved with the training programme of Mr. Saito, trainer, and also his techniques were more developed with coaching by me and Captain Nakamura. However, he used to make us feel uneasy during matches. Though he tried to work harder at the competition, he was to concerned about his mistakes. So, once he had made one mistake, many mistakes followed, one after another. He was a typical man of nerves. His timidity during matches was only a problem for him. That was an obstacle he had to overcome. That was the first obstacle he had met since he had come to the National team. I used to give him advice and encourage him, "Fukao, even if you make a mistake, it is only your own problem. Others don't care about your mistake. Play to your heart's content and dare to make mistakes, because you will make a lot of mistakes anyway."

I sometimes discussed with Mr. Matsudaira, what was the cause of his timidity and how we could improve his weak nerves. From the result of our discussion, we found the cause in the practice of the Toray Company team which he belonged to.



## **Can Players be Improved by the Coach Scolding their Mistakes?**

(If a coach only scolds the player who makes mistakes, the player will never improve.)

Mr. Sugawara, coach of the Toray Co. team, was my teammate when we played in the Tokyo Olympic Games as National players. So I know him very well. Though I am very sorry that I have to criticize his personality and character, I dare to state the way he is coaching the Toray Co. team. He is not very good at coaching his players with his theory because he cannot say well what he wants. Therefore he often roars at his players when they happen to make mistakes, instead of persuading them logically. He is very poor at logical explanations of the causes of mistakes and teaching the players how they should play next. He only gives them on piece of advice, "Do what I tell you!" The players are usually coached only with hard practices organized by Mr. Sugawara, without any theoretical explanation.

Therefore the players cannot understand why they have to be scolded by their coach when they make mistakes. Each of them only says to him, "I'm very sorry I made a mistake", even though they cannot figure out the causes of their mistakes. That is all.

## **Coaches Should Praise Them When They Make a Fine Play**

Mr. Sugawara likes to say to his players, "You are very poor at techniques and skills, so you must practice harder, do your best". That is his philosophy and principle as a volleyball coach. Fukao is a member of the Japan men's National team which is going to be the world champion, and yet he always says, even to Fukao, "You are very very poor at your techniques and skills". It is very natural that Fukao should be depressed mentally and lose self-confidence, as long as Mr. Sugawara roars.

One day I went to the Toray Company with Mr. Matsudaira to ask Mr Sugawara to change his attitude. We said to Mr. Sugawara, "Will you praise players when they do a good job? We don't think they can have self-confidence and can be improved if you do nothing but roar".

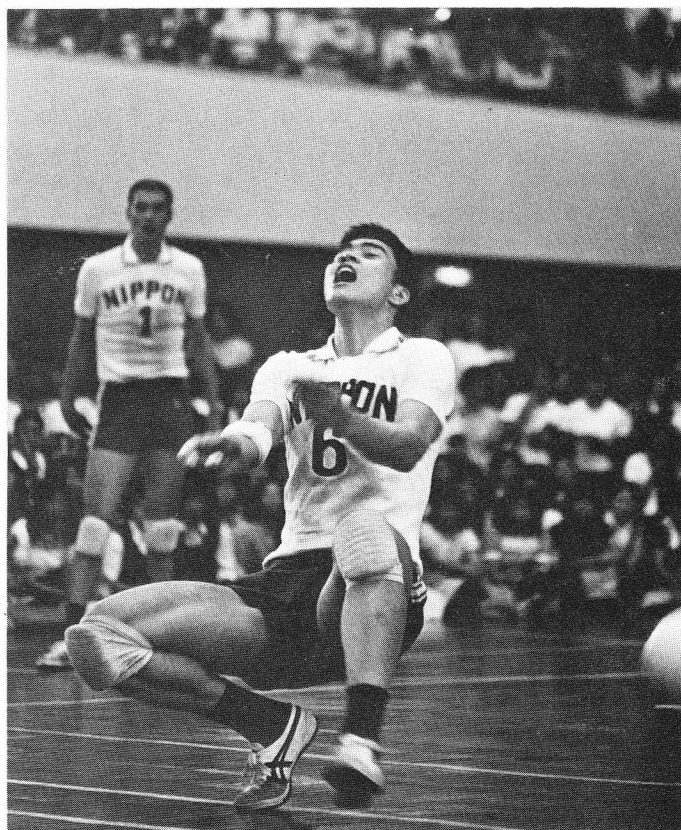
It is very important for players to go through hardships during their lives as volleyball players and to be modest to the coaching staff and their teammates. Fukao was too modest. I thought it came from his weak and shy personality. His personality was weak and shy, but otherwise good. "He should be more impudent", I thought, "He should have greater self-confidence, he should think of himself as the best player on the team". Our request to Mr. Sugawara was to intervene in the

domestic affairs of the Toray Co. team, but Mr. Sugawara agreed to our proposal and he was willing to change his attitude. He must have thought "if Fukao was much improved, our team will be greatly developed".

Mr. Sugawara immediately appointed Fukao as the new captain of the Toray Co. team. He coached his players now by remembering to encourage them. Fukao was getting improved mentally. Thus Fukao could go through the first obstacle and become much improved mentally and physically.

## **Slump:**

No one can grow without experiencing a slump. All the players get into a slump at some time. That is a kind of obstacle which they have to go through to improve themselves. Fukao met the second obstacle just before the expedition to Europe in 1971. He got into a slump technically, and a technical slump brought on his mental weakness again. He began to lose his courage, and even self-confidence, which he had tried hard to develop for some time. Mr. Matsudaira saw Fukao in a slump and said to me, "His recovery will not be in time for the Munich Olympic Games. What do you think about his resignation from the National team temporarily? I think we dare to make him resign from the team for the present". I could not agree with his suggestion, I couldn't dare to give up on him



Fukao being trained on defense.

instantly. Though he was not very good at his techniques and mental power, he was very good at blocking and quick attacking. At that time, we had a feeling something like friendship between us, as we had played on the national team for more than one year. I had a stubborn idea that I should not give him up easily until he became an excellent player on the team. I thought that if I gave up then, my efforts to coach him would have been in vain and my coaching would have been useless for him. I decided that I should try to improve him again, even if the result would be in vain.

When a coach tries to bring up a player, he has to be more patient than the player. All the players and coaching staff recognized that Fukao had potential and that they had selected him for the National team. I thought and thought; Fukao had many good points, but when we see him at the bottom of a slump, we cannot find his good points. Why and how has he gotten into a slump? If we see the causes of his slump, we must try to find his good points again. I have to be patient until that time.

I am sure that we coaches must be more patient than players who want to do their best to get out of the slump and improve themselves. This brings us good relationships between coaches and players. With this approach we can easily develop our players.

### **"Be a Fish on a Chopping Board!"**

I asked Mr. Matsudaira not to make him resign from the national team, though he had lost his self-confidence and his good points, and he was still at the bottom of a slump. Mr. Matsudaira agreed to my suggestion. I said to Fukao, "You stand at a turning point. If you want to get out of the slump, you must make your efforts as desperately as a fish on a chopping board". Though I said not a word about my suggestion to Mr. Matsudaira, he seemed to have perceived the circumstances. Since Fukao

was told by me, "..... as desperately as a fish on a chopping board", he had come to me and said, "Mr. Ikeda, please give me a harder practice and teach me how to improve myself". He then trained and practiced with a desperate look, after the usual practice scheduled for the team, during the camp or the expedition to foreign countries.

Later on, remembering what he was told by me, Fukao said, "At the time, I made up my mind to do my best as desperately as a fish on a chopping board, as Mr. Ikeda told me. If I couldn't get out of the slump and improve myself after my efforts, I was going to say 'good bye' to the National team. I said to myself that this expedition was the last chance given to me."

It was successful for us to drive Fukao mentally into a corner in that way. I also have experienced the same mental state that Fukao had. The Fukuoka University which I graduated from is not famous for volleyball, and our volleyball club was not very strong. I was always aware that I should rely on myself. I had to find my way for myself. I thought that I would do my best to improve myself. I would not care whether other teammates might practice hard or not, and even if I would be wrong in my way, only I could suffer the damage. If the players of the schools which are very famous for volleyball were something like tulips in the garden, I could be something like weeds by the road. No one tries to bring up weeds, though many people try to bring up tulips. Weeds cannot expect others to bring them up, but must rely on themselves. I was one of the weeds. One of weeds who has played with tulips and has been coaching the national team. I found Fukao something like a weed. I thought he must have something stout like a weed.

At any rate, during the one months tour of Europe, Fukao continued to practice harder and harder, with the younger players in the morning and with

Ikeda, spiker of the Yawata Steel Company, 1962.





the main players in the afternoon. He was desperate. At the end of the expedition we had a couple of matches with the Soviet Union national team. Fukao did a remarkable job in the matches in Moscow and in Leningrad. His blocking in the middle completely shut out the hard spiking of the Soviets, and his quick spiking struck effectively into the opponents court. Because of this, Fukao became one of the players who would get a ticket for the Munich Olympic Games.

### **Changing a Yielding Spirit into an Unyielding Spirit:**

It was very valuable for Fukao to have experienced the desperate efforts. Just after we came back home from the expedition, he wrote to me, "When I reflect on myself, I find that I had always been yielding. I feel that I had changed myself into an unyielding spirit now and I am not what I was". I was very impressed with his letter. I was very happy to find a player who I had helped by my coaching. The "unyielding spirit" he acquired was to bring him a power to overcome the third obstacle he would meet next.

The third obstacle came to him during the tour to the Soviet union in 1972. He got into a slump again. He couldn't work well at his blocking and his quick-attacking. However, I was not very worried about his slump, because I believed that he was quite different from what he had been. I hoped that he would overcome his slump by himself.

While Fukao was at the bottom of the slump for the third time, Nishimoto a new comer to the National team, was distinguishing himself in the team. Nishimoto played in his place, while Fukao sat on the bench during games. If Fukao didn't acquire an "unyielding spirit", he might think, "Our coach will not ask me to play even in one game. My techniques and skills must be useless for the team. I'll be hopeless for the Olympic Games". As I expected, he was roused to action. He practiced much harder than ever during the camp just after we came home from the Soviet Union. I did nothing for him except give advice on the basic techniques and skills, for I believed that he could overcome his slump by himself. After his hardships he could at last get out of the slump by himself and instantly replace Nishimoto. He worked remarkably hard during the international competition between the Soviet Union and Japan. His blocking points were the most of all players on both teams.

### **To Forsake Players by Way of an Experiment**

During the international competition I knew that Mr. Matsudaira had the same idea about Fukao as I had. As soon as we had caught up to the Soviet Union and with the score even in the fourth game of the third match held in Mito, Fukao missed a direct



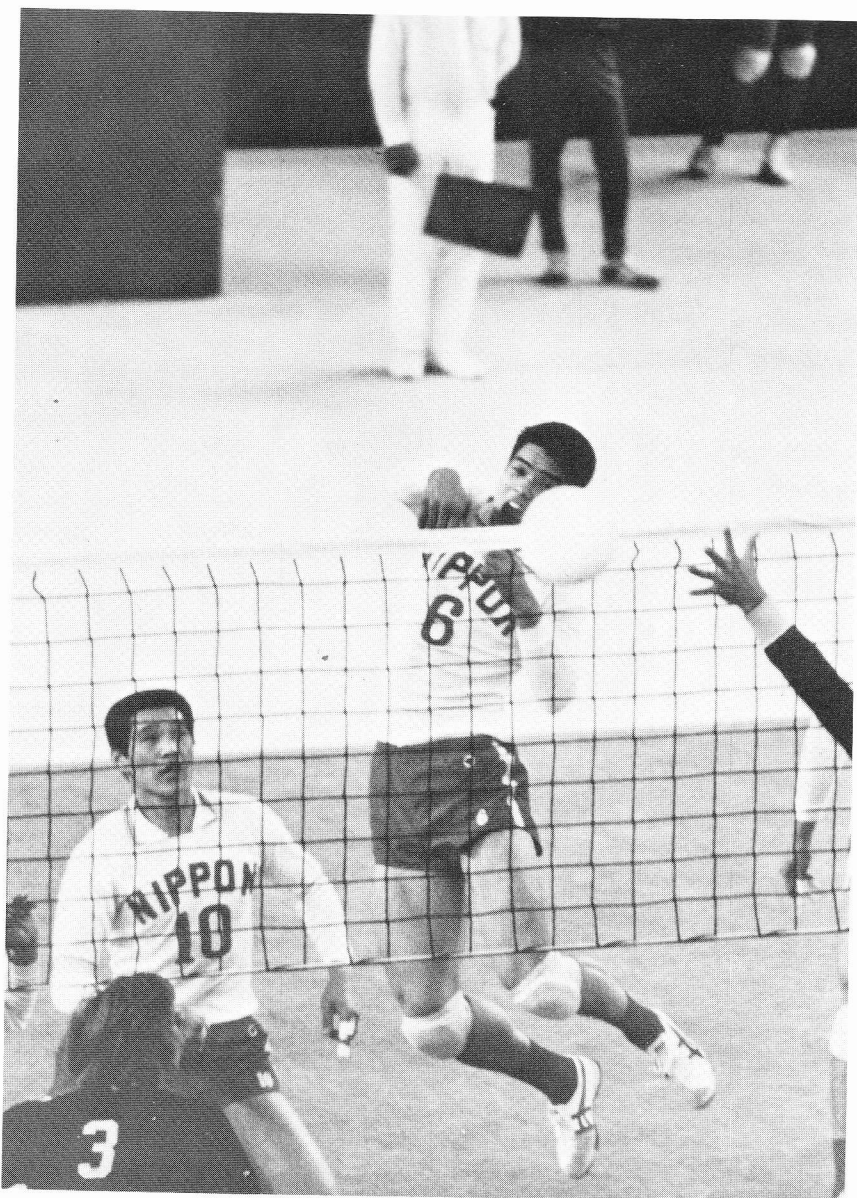
Fukao in the match Japan vs Soviet Union, in Mito City.

spike. Because of his indecision, we lost the game. After the match Mr. Matsudaira said during an interview with the press, "An easy mistake of Fukao brought us defeat". He dared to tell them the name of Fukao clearly. He had never mentioned a personal name of players when he gave the impression of the match to news reporters after the match. It was exceptional for him to mention the name of Fukao. I could see why he mentioned it. If I were in his place, I would do the same thing.

We were convinced that Fukao was not what he had been and really had an unyielding spirit. Therefore we expected that Fukao would be much stimulated when he knew what Mr. Matsudaira had said to news reporters. Fukao rendered distinguished services in the fourth and fifth matches as we expected. He became an excellent player who we could send on to the court with confidence during the second and third games if he made very bad mistakes in the first game.

Thus, Fukao has grown into an indispensable player to the National team. Since we recognized his potential, we have done for him all the things we thought would improve him. Sometimes we praised him, scolded him and forsook him by way of experiments. We have tried every possible means to improve him mentally, technically and physically, as he has changed and grown.

When we coach players, we should be flexible in coaching them and we should compete with them for patience. I now recognize how important it is to



Fukao at the Munich Olympic Games

be patient while coaching players when I reconsider Fukao's growth. When you see how Fukao has grown as a player, you understand that we coaches have to help players with their character building as well as coach them in volleyball. A player often meets technical obstacles in the process of his growth.

He can cultivate his character step by step as he overcomes every obstacle on techniques and skills. In other words, a coach has to train a player technically, carefully watching the process of character building.

## **We Have to Coach a Player in his Growth of Character — The Case of Oko:**

You can see the same tendency as Fukao in the process of the growth of Oko who is called the Number 1 cannon spiker in the world. However, Oko started to play volleyball under quite different circumstances from that of Fukao, who has played volleyball in junior highschool and senior high-school, although those schools were not famous for volleyball. So did Sato; both have been playing in the Toray Company team and the Fuji Film company team since their graduation. So they have at least mastered the ABC's of technique and skills in volleyball.

On the contrary, Oko started to play bush volleyball in Toshiba Gakuen (Vocational School) after junior high school. Then he found volleyball very interesting. As he wanted to play volleyball correctly, he decided to move to Nippon Kokan Steel Company (N.K.K.). Of course, he couldn't play very well, even pass a ball. Mr. Matsudaira found he had potential and selected him for the National team, though he didn't have the basic techniques and skills. After all, he jumped up to the National team from a bush league. We had to teach him the basics of volleyball during the National team camp. Since he was a player similar to a student entering university from elementary school without the process of junior and senior high school, I had to be a tutor for him and teach him the basic parts like junior and senior high school.

### **First of All, Teach Him Hardships:**

Oko had never experienced the hardships of a volleyball practice. First of all I began to teach him the hardships of practice. I tried to know his physical condition and endurance. Soon I figured out the amount of practice required before he fainted or before he couldn't practice any more the next day. We also determined the amount of practice he could recover from with a good night's sleep.

Once when he injured his shoulder, for example, he was very worried about it, because he had never had a sore shoulder. He was afraid that he might not play volleyball any longer. I said to him, "Don't worry about that, I have often injured my shoulder. But I continued to practice or play volleyball with the injections to cease pain, even when I couldn't move my shoulder without pain. I used to cure my shoulder with practice. "You should do as I used to do. Don't be scared!" Oko was able to overcome his sore shoulder.

Everyone is frightened when faced with something that has never happened before. However, he went on improving his techniques and skills, just as a desert absorbs water. He came to the National



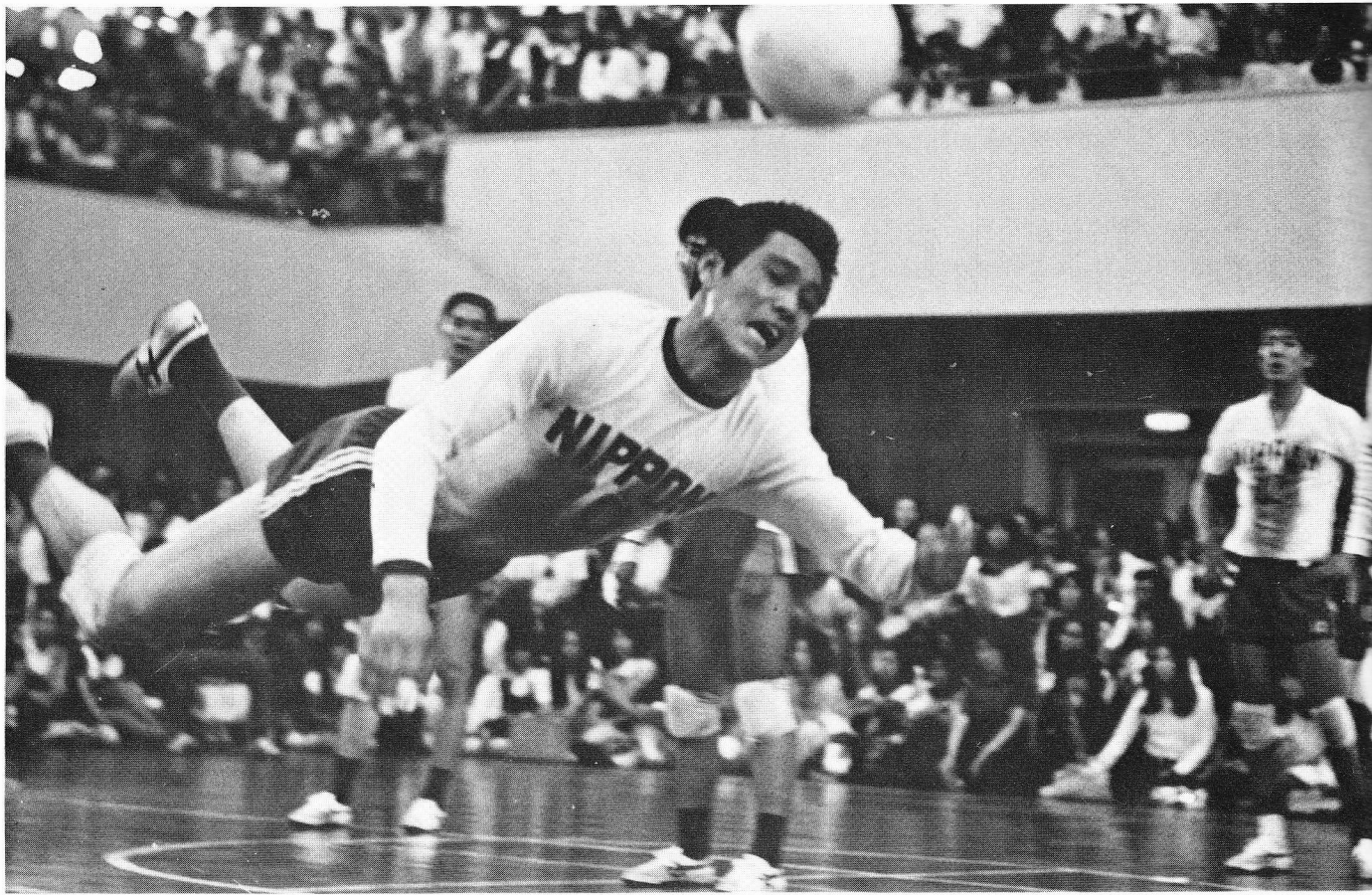
Powerful spike by Oko.

team at 19 years when he could master everything quickly and easily. Since then, Oko has made great progress for six years, up to the Munich Olympic Games. He made great progress technically and mentally. As I stated above, we have to take the best coaching method for a player in response to the process of his growth. It is very important for us to find what is the best method for a player. In other words, we, as well as a medical doctor, have to give each player the prescription for his improvement. If we give a player the wrong prescription, he may be spoiled. Consequently, I had to make efforts to make the prescription for Oko, discussing it with Mr. Matsudaira. I used to think what was the best method for his step at a certain time.

### **To Be Improved by the Experience:**

When Oko made a mistake, or didn't play well, I threw the ball at him. I scolded him and roared at him. Then I would give him a hard practice for a long time. Finally he fainted. Everytime he fainted, I sent for an ambulance on the telephone, although according to my experience, I knew that he would recover consciousness if I left him as he was. I didn't think it necessary for him to get in the ambulance, but he must have thought the necessity. It was a kind of coaching method to send for the ambulance. If I explained that he didn't need the ambulance, he couldn't understand what I meant.





Oko during a strenuous training session.



Ikeda, coach, giving advice to Oko.

He has to understand with his won experience. He knew and learned that a human being was tough beyond his thought that he needed an ambulance. He had a self-confidence that he could work much harder than ever. This method was taken at the beginning of the process of his growth. I had to find the next method for him in response to his growth. Now he grew mentally and physically. I couldn't roar and scold him in front of others any longer. My next coaching method was a friendly communication between he and I.

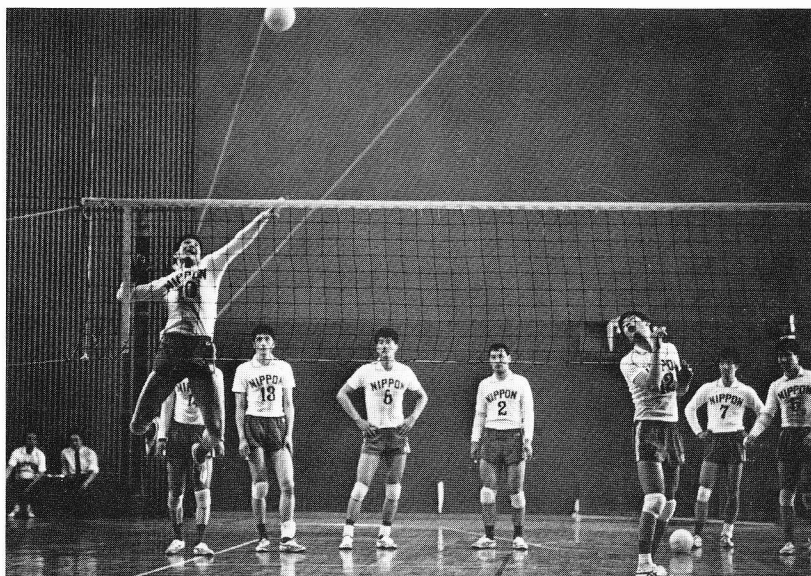
### To Think Highly of a Player's Pride:

The more mentally and technically a player grows, the prouder he is. We must not disgrace his pride. I stopped roaring and scolding him in front of others. After the Mexico Olympic Games, I used to take Oko to a restaurant or a coffee-shop after practice or a match and I coached, taught and gave him advice, during coffee and meals with him.

For example, I asked him, "Why did you play like that in that situation? Why couldn't you be patient a little longer, etc?" Then I gave him advice, "You should have played like this in this situation." Sometimes I taught him how to play theoretically. I think it is good enough for the players under 20 years to give much harder practice in the gym, roaring, scolding and throwing the ball at them. For the players who advanced to the next step of their growth, we should have good communication with them at a restaurant or coffee shop as well as in the gym. We should drink with the more advanced players, discussing volleyball. We should think highly of their pride, while we should drive them to more enthusiasm and to what we want them to do, through friendly conversation. That is, we should select our coaching method in response to every step of their growth.

### Making Use of a Player's Pride:

We have to make use of players' pride who have become independent and make them encourage themselves. During the camp just before the Munich Olympic Games, Oko got into the slump of his defense skills. I gave him harder practice on defense. I kept on hitting the balls to his left and right sides, some times forward or back of him. He tried to dig the balls well, but he could not send the balls he dug to the direction he wanted to. His defense was so bad that Captain Nakamura and Yokota couldn't cover the balls he dug, however hard they might try. I purposely scolded them about why they couldn't cover them, without scolding Oko, although I knew that the bad covering was a result of the bad defense by Oko. He, of course, knew that they couldn't cover the balls because of his bad digging, and that they were being scolded because of him. They were his senior players. Now he had two kinds of hardships, physical and mental. He had the pride of a National team player. His pride could barely stand digging terribly and watching them being scolded for him. He wanted to be trained much more rigorously to keep his pride. That was what I had expected. If the same thing had happened in his earlier days, he might have thought, "I am not to blame, they are." Oko, now could judge who was to blame. Therefore I could use this method in this situation. Again, I dare to say, a coach has to see what is the best method in the process of a player's growth.



Oko, spiking in front of his teammates.

My biggest memory while coaching Oko was when he could walk on his hands for nine metres for the first time. When he came to the National team, he couldn't even walk on his hands. After a while he was getting better at it, but he couldn't do nine metres. One day Mr. Matsudaira said, "Every man has something like an inferiority complex. If he can remove it, he has self-confidence and pride. Then he will make great progress." After I heard him I thought, "Oko was the only player that couldn't do nine metres walk on his hands on the National team."

The achievement of nine metres walk on his hands would bring a feeling of great progress to him.

At the beginning he could walk only two or three metres. Soon he could walk almost nine metres, but he fell down 20 or 30 centimetres short. Then I could have said, "OK, good. So much for today. You will try and achieve your target tomorrow." I said, "Try again, Try until you achieve your goal." He tried and tried desperately, clenching his teeth, in front of all his teammates. After his countless trials and desperate efforts, he could finally do nine metres walk on his hands. At that moment, all his teammates were much delighted and had tears in their eyes. I remember that Oko stayed on and off without falling on the floor, "They cried with great joy at the moment that I achieved the nine metres' walk. They are very friendly to a player such as I."

He had a deep friendship for his teammates, at the same time he could achieve nine metres walk on his hands. Moreover, he had a self-confidence and pride, and a belief that "the efforts change impossibility to possibility", while his inferiority complex vanished.



### **Players are Being Informed Day by Day**

All the players I am coaching are in the generation when they can make great progress. So is Oko. Six years from the time he came to the National team to the time of the Munich Olympic Games, were very important for him. He made rapid and great progress for those six years, quite different from those of the old generation between fifty years old and sixty.

So they grow every year, every month and even every day. Their growth means to build their character as well as to improve their techniques and skills.

Consequently, we have to contact them, considering the process of their growth. They, Morita, Oko, Shimaoka, Fukao and so on, are not what they were yesterday. They are improving every day. We must coach them without forgetting that.

Oko, just prior to taking off for spike.





# Physical Training for Volleyball

Masaru Saito

## The Birth of an Acrobatic Gymnastic Programme for Volleyball

The physical strength of a man may be divided according to function into the following categories:

1. Muscular power
2. Explosive Power
3. Agility (quick movement)
4. Endurance (stamina)
5. Flexibility
6. Co-ordination (timing, rhythm, balance)

When I was asked to train players for the National team, I was requested to improve co-ordination (ability to improve and control the body movement) of the players, first of all. The players are much taller. I have to improve their acrobatic co-ordination to that of a gymnast. How should I tie it to volleyball techniques and skills, I wondered.

I have never trained players as tall as the National players before, though I have coached junior and senior high school players and sometimes university players and therefore was asked by Mr. Matsudaira. I had little reason for self-confidence. I was not sure whether I would be successful or not and worried about that.

After thinking for a long time, an idea came to mind. It involved a method whereby players could start to practice easier items first and advance to more and

more difficult ones. For example, they would start on an easier item such as rolling forward, somersault, and so on. When they could do those well, they could advance to the next step. At their body control improved, the items of exercise would naturally become more difficult step by step. Finally they would practice the back somersault. If they could do it perfectly, my training programme for them might be successful. Then I would give total physical training in all six categories, to improve their physical strength for volleyball. The outline of my idea was as stated above.

## Volleyball Exercises (Gymnastics) in Succession:

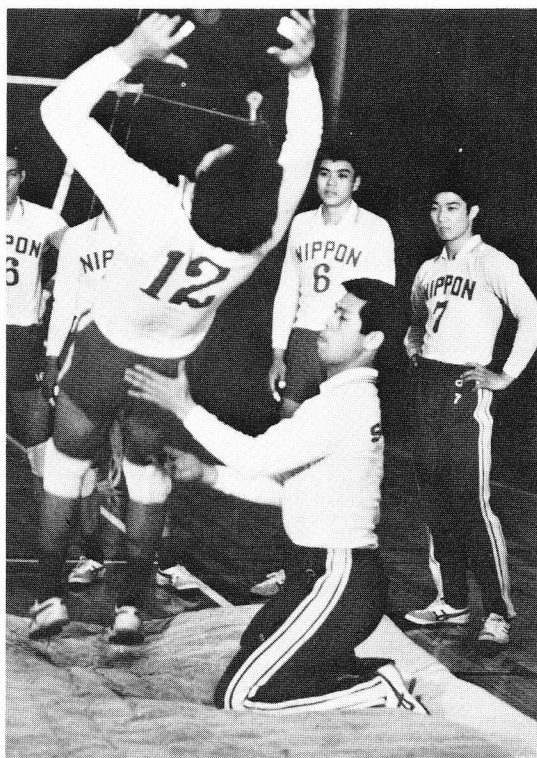
I tried to make a programme of volleyball exercise in a pattern which could be included in the rhythm of volleyball. There were successive movements in a series of exercises, from easier movements to much more complicated ones, from shorter exercises to longer ones.

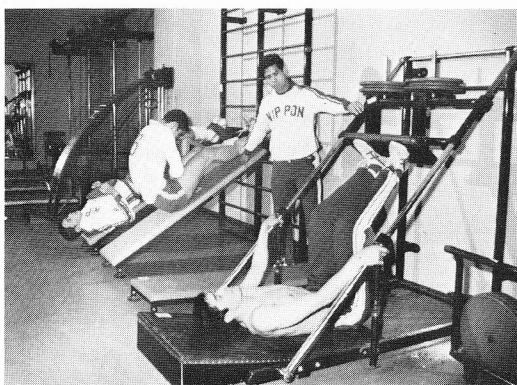
I thought for example, that running with the rhythm of volleyball might be better than only running for endurance. Finally I completed "Volleyball Exercise in Succession" which consists of twenty-three successive movements for thirty-five minutes to fifty minutes. The volleyball exercises in succession were first used for Sato and Shimoaka who were younger players, and Oko, who had injured his knees in 1969, just before the World Cup.

I trained the two younger players harder and Oko with a special programme without any burden to his knees. We always doubted that Sato was too slim to stand hard volleyball practice. Moreover, Sato had a constitution which was very difficult to build up with muscles. Oko, Fukao, Kimura and Nakamura showed good muscle development after training a certain period, but Sato showed hardly any at all. Consequently, he didn't have enough power for jumping and was very poor at his physical fitness. He could apparently move slowly at 1.98m. He was very weak at both upper and lower body movement. I stressed the improvement of agility and muscle power. I trained him with other body-building equipment, considering what the best method was in his case.

After a while the effect of volleyball exercise in succession was gradually showing on the three players. Mr. Matsudaira encouraged me saying, "They are getting better and better with your training method. Keep going on your programme".

Teaching how to roll backward in the air.





Weight training for muscle power.

At that time I had enough self-confidence to train the National players for the first time. I was convinced that my physical training methods would be effective on building physical strength for volleyball.

### **Training with the aid of a swinging ball:**

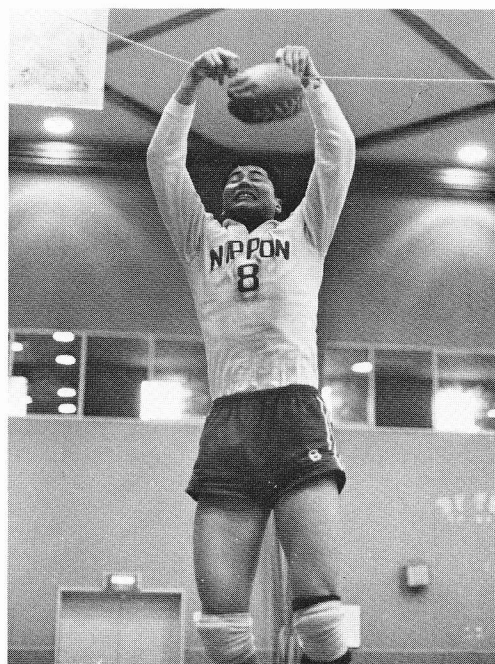
The method of training these three players brought a new idea to me. That was, to use a mat for exercise. It was feared that they might be thrown against the floor and injured during their violent movements of exercise. While they exercised with a mat, I found a new training method for co-ordination. This involved training with the aid of a swinging ball. This was very effective in the improvement of agility and jumping power, as well as for co-ordination. The method was as follows. The ball was tied to a rope about 6m long and I swung the ball over or under players while they executed an exercise. I adjusted the height and the speed of the ball with each player's ability, while I swung it. I was satisfied with the result of the physical fitness test of those three players trained with this experimental method.

During the National team camp after the World Cup, I trained Yokota, Morita and Shimaoka, who were university students, with this new method. During the camp before the international matches with the Bulgarian team in March of 1970, I was appointed as a trainer for the Japan National team and I trained all the National team players with my own methods and physical training.

### **More effective training methods to strain every nerve:**

I trained every player not only with my special methods, but with more effective methods, designed to strain every nerve of a player.

When we train players with the same theme, the same method and the same pattern for a long time, they become used to the method and the pattern and are apt to exercise by habit, gradually losing



Throwing the sand bag down after jumping.

concentration to the training. However hard we may train them, we cannot expect the effect any more.

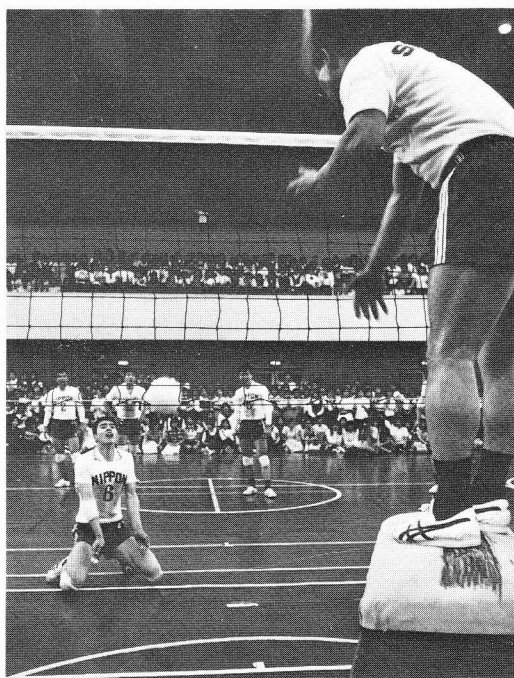
Therefore, I organized various methods combined with changeable and complicated patterns under a theme, and trained them with a different method every day. They couldn't exercise only by habit. They had to strain their nerves to do well. They were always required to make decisions instantly during their exercise. It was very successful for the National players.

The result of this more strenuous training method showed in two months with the improvement by 7 cm of the vertical jumps of Morita, Yokota and Shimaoka. Generally it takes three to six months to see the effect of physical training. It was incredible for us to improve 7 cm in vertical jump in two months.

We had good results with the new training methods, even if these results were due to the young age of the players.

### **Balance Between Exercise, Nutrition and Rest:**

At that time it was Fukao, a freshman, who made rapid progress in all areas of volleyball. We were very happy to see his great progress. When he first came to the National team he often fell down and fainted during strenuous practice, such as one man defense drills. At first we were afraid that he might have a heart condition or be an epileptic. He consulted Dr. Kuroda and was examined. Nothing wrong was found. The coaching staff discussed why Fukao fell down and fainted easily and so often. I



Fukao being trained on defense.

thought the cause of his fainting could be an imbalance between exercise, nutrition and rest. He had always trained hard under Mr. Sugawara, coach of the Toray Company team, when he was a member of that team. He also worked hard mentally there. He overworked himself physically and mentally. He didn't eat enough food to compensate for this, only enough for an average worker. It was natural for him to be short of nutrition as he was large sized, 1.94m., he overworked himself and kept to a diet as for an average worker.

After consulting with Mr. Matsudaira, we decided that we should give all the players enough nourishment and rest to keep the healthy in spite of hard practice and training. Fukao's physical strength improved and his weight increased 10 kilograms over two months of hard practice. He now weighed 88 kilo-grams. He never fainted again even after much harder practice. From this I learned that the improvement of physical strength and techniques needs to be balanced with good training methods, nutrition and proper rest.

### **The Training Method is Worth Preventing Injuries to Players:**

Our strenuous training methods had an unexpected effect. I found it helped prevent players from injuries. Minami landed on the foot of a player after blocking and had an ankle sprain in the international match with Poland in 1970. Such a sprain would usually take one month to be completely recovered, but it took only two days until Minami could play again. It was incredible to

me. His ankle sprain was very slight because he had promptly relaxed his legs as soon as he had felt his foot on the other player's foot. This ability to react quickly together with the strenuous training kept him from serious injury.

I have heard that many soccer and baseball players get serious injuries during practice and games. On the other hand, the National team volleyball players have never suffered serious injuries except for Nekoda, who received a broken arm. This record stands even with volleyball practice being much harder than any other sport.

### **Increasing Muscle Power:**

A main focus of the training just before the Munich Olympic Games was to strengthen muscle power. We had already achieved our target of the improvement of co-ordination and had become more effective in all fields of volleyball with my methods of physical training, even more than we had expected. We knew that muscle power was of basic importance for volleyball so we focused on the development of it and trained hard. Later Mr. Matsudaira showed his appreciation of my methods by saying, "Look, they are getting stronger and stronger day by day with your methods. All the muscles, back muscles, stomach muscles, explosive power, spiking and jumping are much improved. Your methods are excellent. Thank you very much for your work."

I was very happy, not only to be praised by Mr. Matsudaira, but also to know that my programmes and methods were right.

The following is a description of the outline of physical training for volleyball used by the Japanese men's team.

### **Warm Up:**

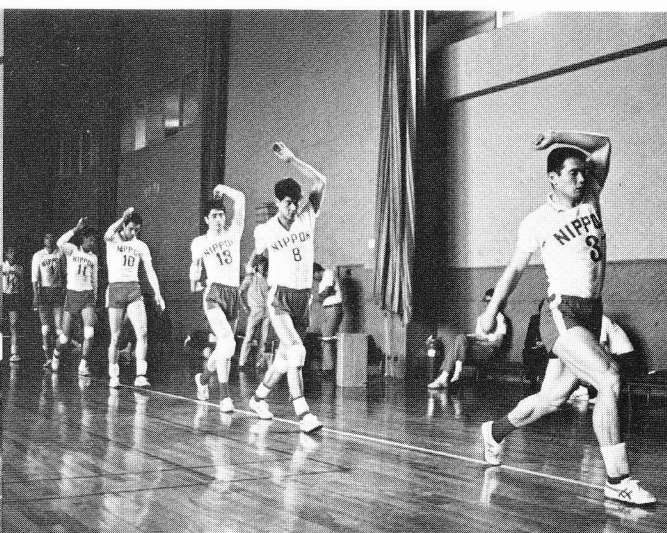
Warm up is very important to lead the main exercise effectively and successfully. It must be organized after levels of technique and physical strength are considered, sex distinction of players and temperature of the day are checked, and substances of the main exercise are fully investigated. Without this being well done, warm-up could be worthless for players. It must be given careful and close consideration. For example, you sometimes find players jogging counter-clockwise only, like track and field runners, during their warm-up. I don't think this method had been very carefully thought out. Volleyball players have to move or run in all directions. It is even more important that warm-ups be organized to keep players interested and mentally concentrating. If you continue to do warm-ups in the same way and pattern for a long time, players may do the exercises by habit and not concentrate or be mentally alert.



During warm-up players can mentally as well as physically prepare for the main exercise drills. It is natural that the organization of warm-ups should be done to inspire the players' interest in the drill exercises — physical training and practice of volleyball techniques.



1

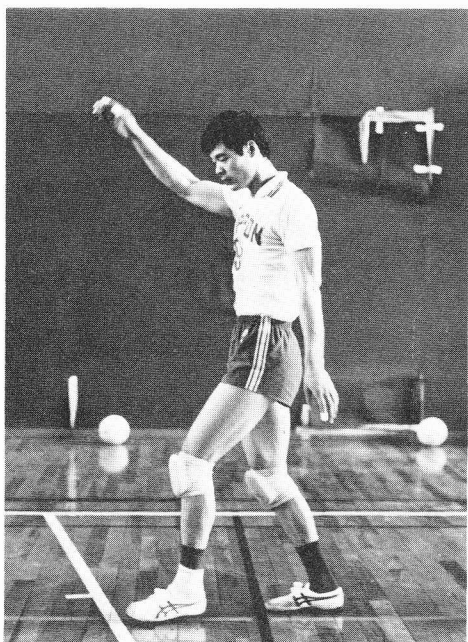


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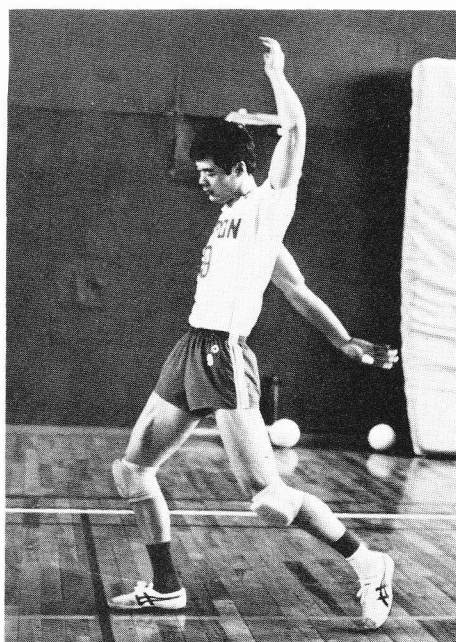
Stepping forward, bending the body backward at the same time. (1, 2)

Stepping backward and at the same time bending the body backward. (3, 4)

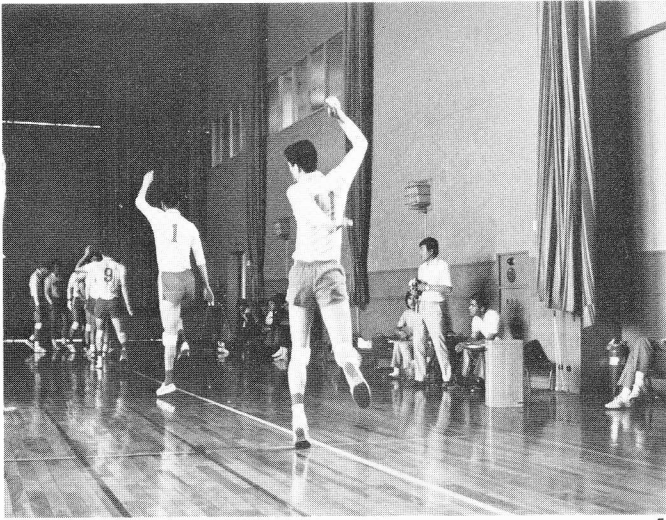
Skip backward and forward. (5, 6, 7)



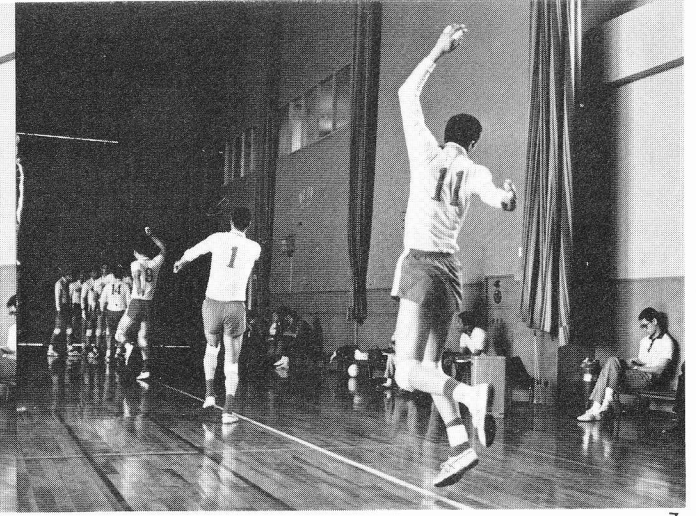
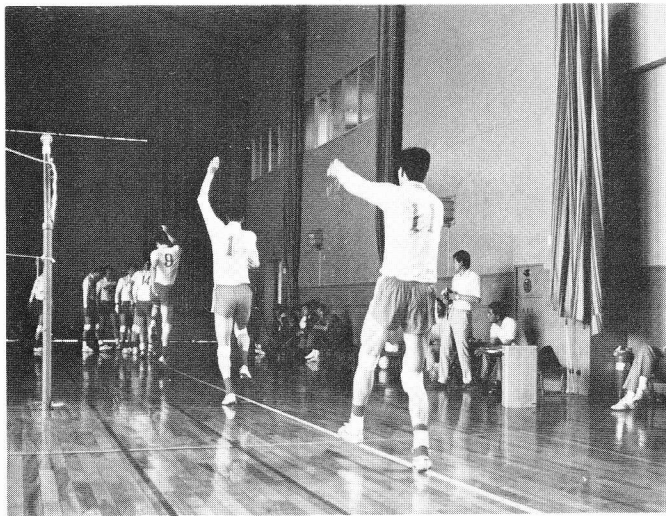
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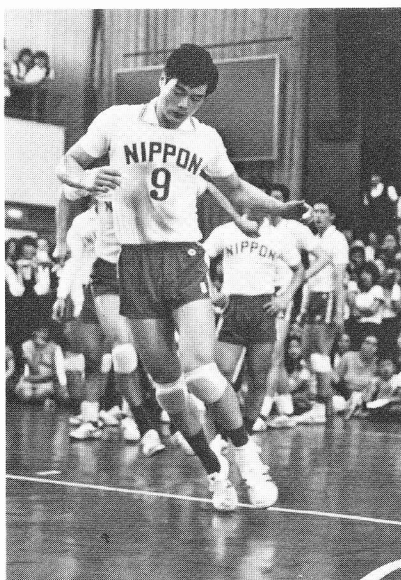


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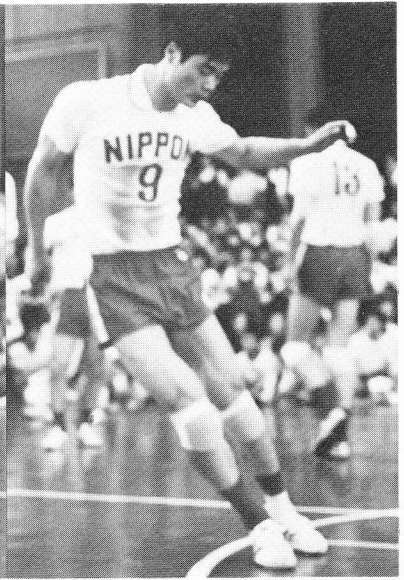
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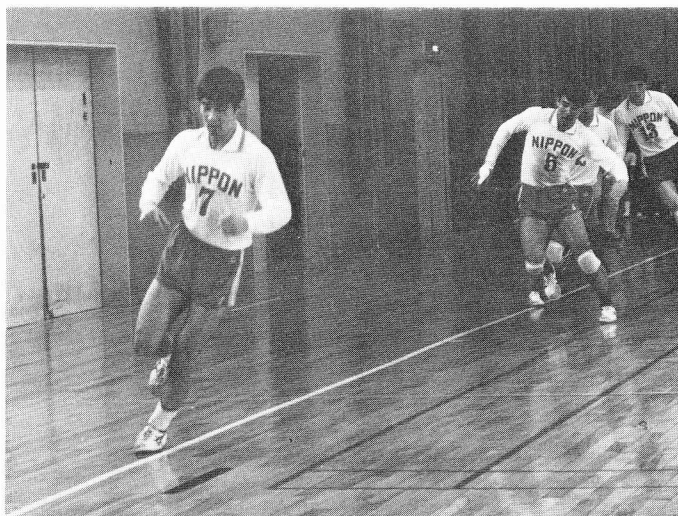


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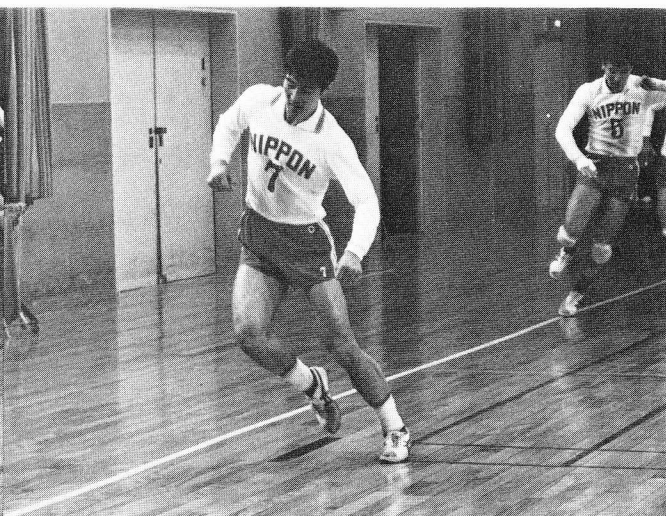


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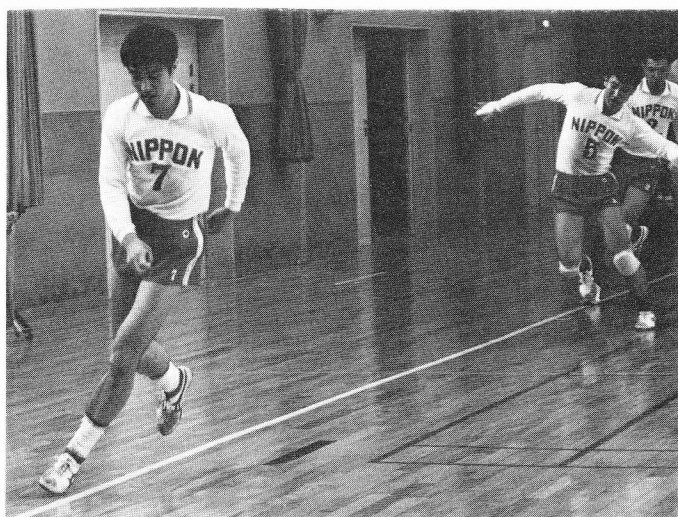




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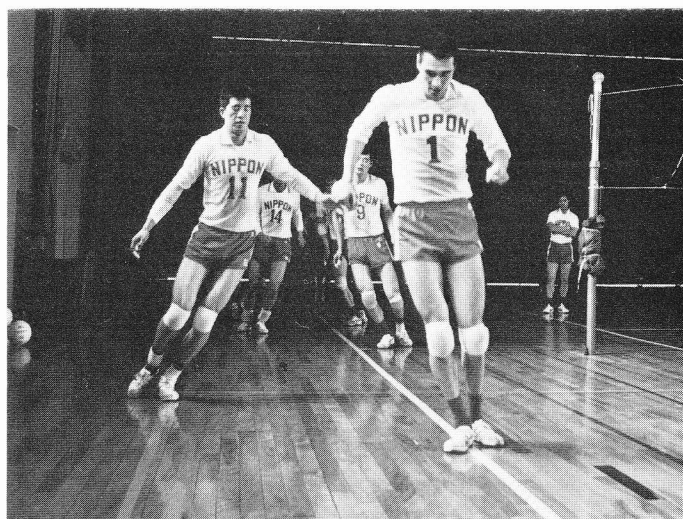


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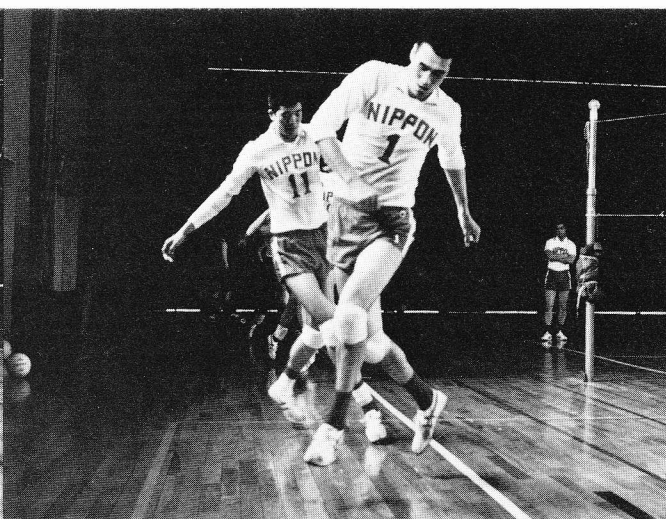


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Zig-zag hopping-nos. (8, 9, 10)  
Cross-over hopping. (11, 12, 13)  
Combination of zig-zag and cross-over hopping.

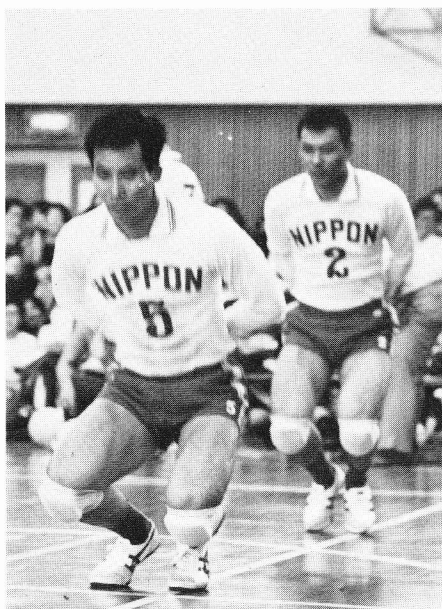


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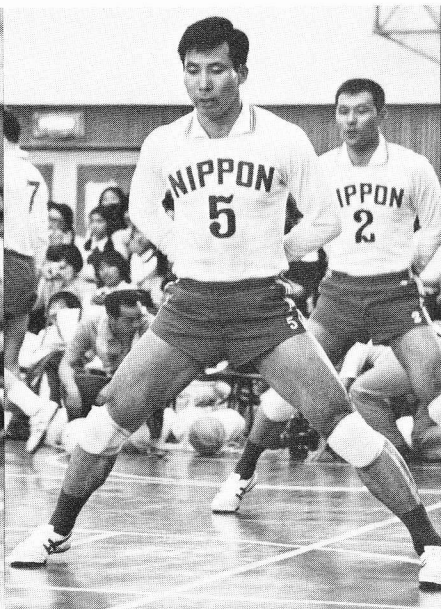


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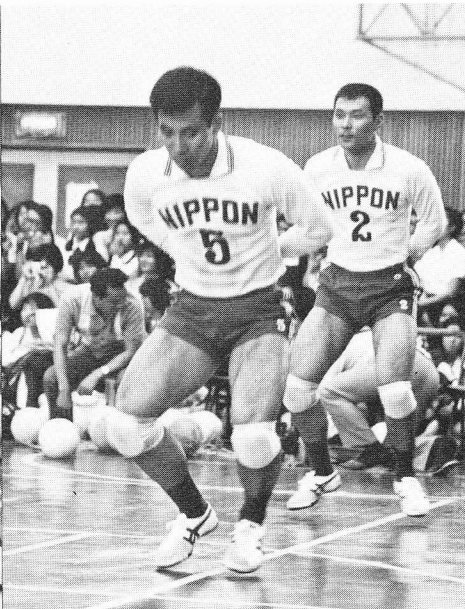




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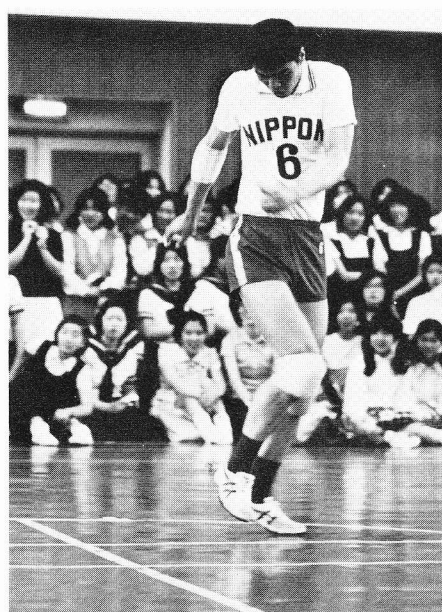
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18

Straddle hopping keeping centre of gravity steady and hands behind back. Hop forward and backward. (16, 17, 18)

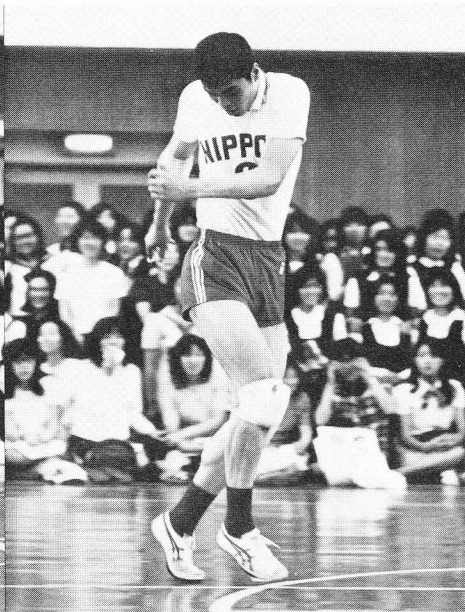
Straddle hopping with knees straight. Use ankles and toes. Hop forward and backward. (19, 20)



21



22



23



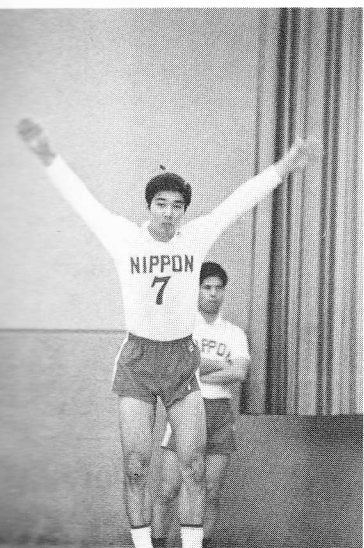
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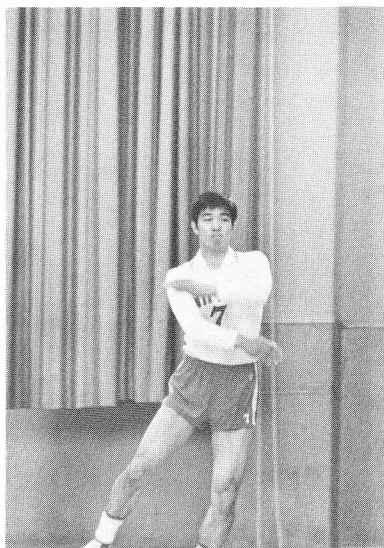
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Twisting as fast as possible and moving sideways. (21, 22, 23)

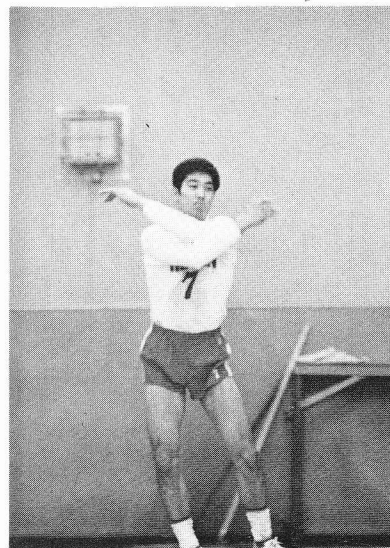
Side-stepping with very long steps. Arms swing in and out. (24, 25, 26, 27)



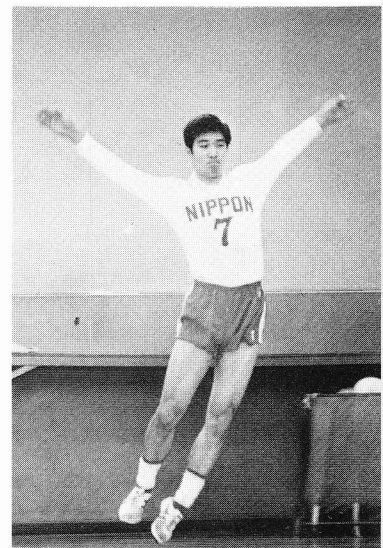
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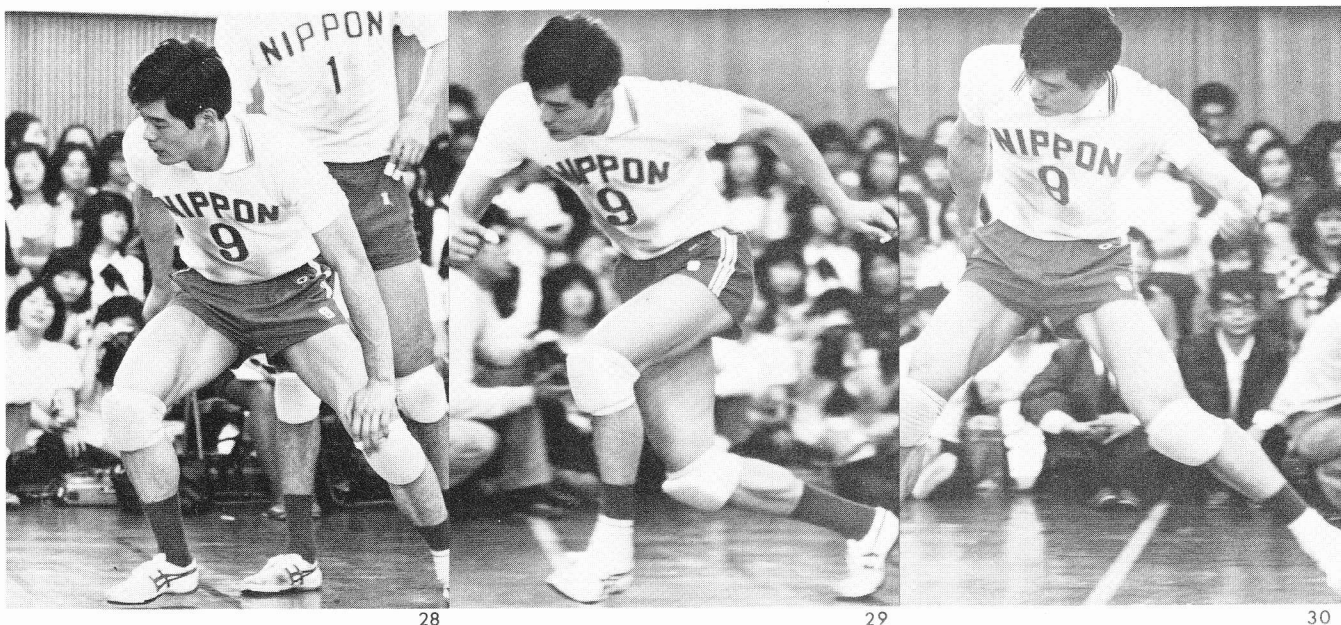
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26



27



Crossover steps. Keep centre of gravity as low as possible. Bend upper body forward. Movement is sideways. (28, 29, 30, 31)

### Complex Training for Physical Strength:

As I stated at the beginning, physical strength consists of six elements. We cannot always achieve good results in physical training even by training very hard on each element. Even if we improve every element of our physical fitness, we do not always improve our volleyball skills.

For example, suppose there is a man who can run very fast and is able to lift very heavy loads. Can you assume he will be good at volleyball skills? He will not always be a good volleyball player. Therefore, we need physical training methods exclusive to volleyball. They must be organized and arranged for volleyball techniques and skills.

We are sometimes under the illusion that we should imitate the methods of Europe and North America because they are better than ours. I am aware of the fact that scientific research on sports in these countries is well organized and ahead of us in some fields. We should be aware that we have different physical characteristics and ideas of the function as tall as European and North American players, thanks to Mr. Matsudaira's efforts. When we compare them to foreign players at the same height, we find that their arms are 10 to 15 cm shorter than foreign players. That is one of the differences. We can therefore never catch up or be even with the foreign players and never overcome them, if we only imitate their methods. We must organize and create methods that are fitted to Japanese volleyball players.

With this point of view we organized and created new methods for Japanese volleyball players,

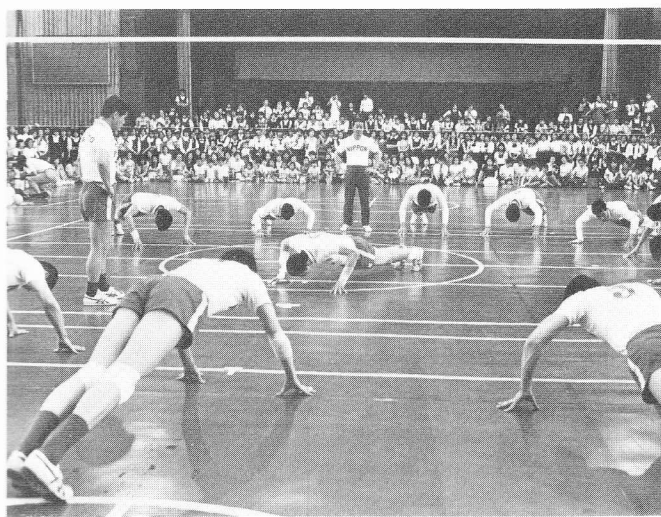




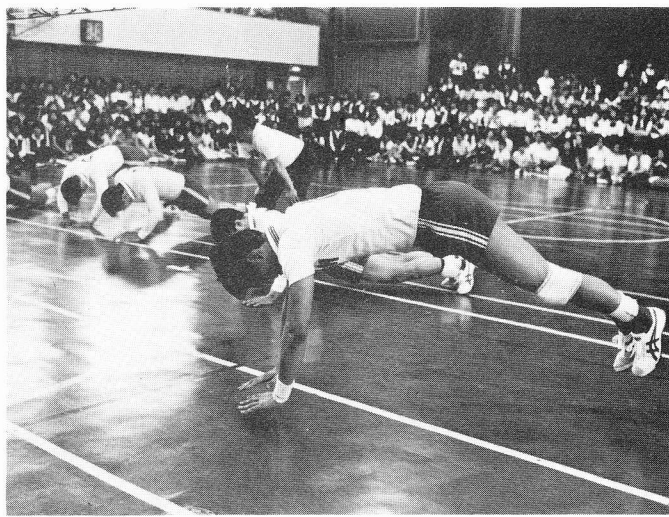
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through a long and hard history of the Japan Men's National team. We have jumped up to the top level of the world.

I will show you some of the complex methods we have used on the National team. They are very hard to classify completely into the six elements as every element is complex and combined with other elements. You will find that these exercises should be done with volleyball movements, from beginning to end.



1



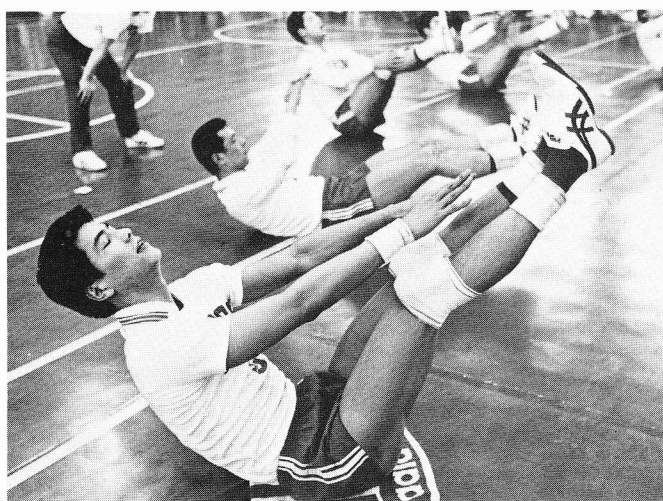
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## Physical Training for Muscle Power:

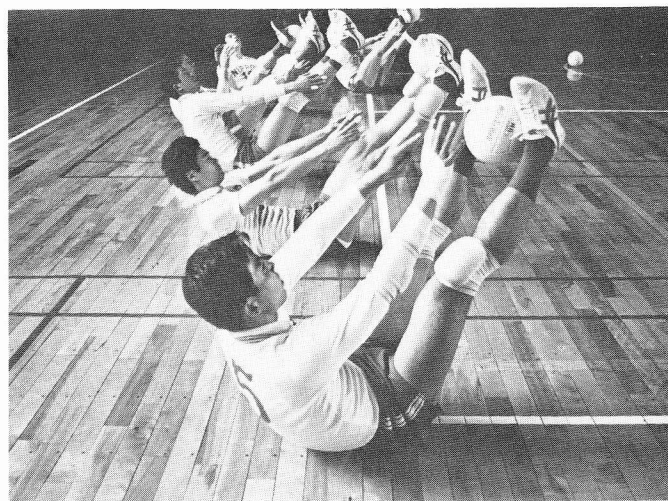
1. Push-ups with fingers. (1)
2. Push-up, leaping up from push-up position, both arms should be as wide as possible and finish with arms crossed as 'X' letter. (2-3)
3. V-sits (more effective with two balls in hands and another between the feet). (4-5)
4. Back arches — partner sits on legs. Lying prone with ball in hands arch back twisting (like figure 8). Don't let the ball touch the floor.



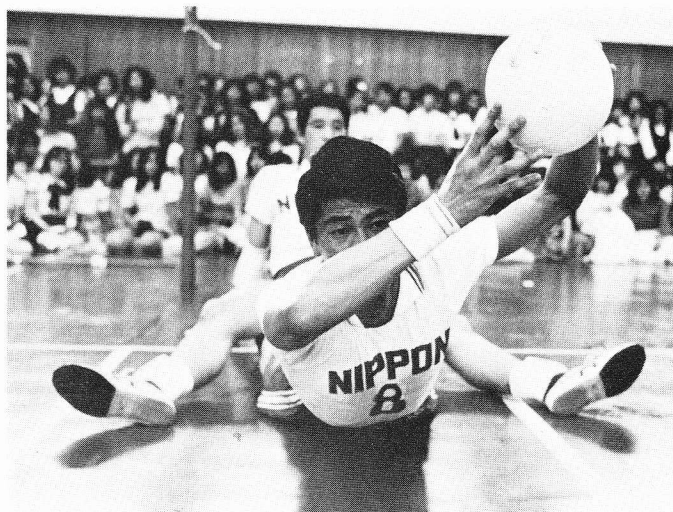
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### Physical Training for Agility:

You will find some of the same patterns that I described in the warm-up.

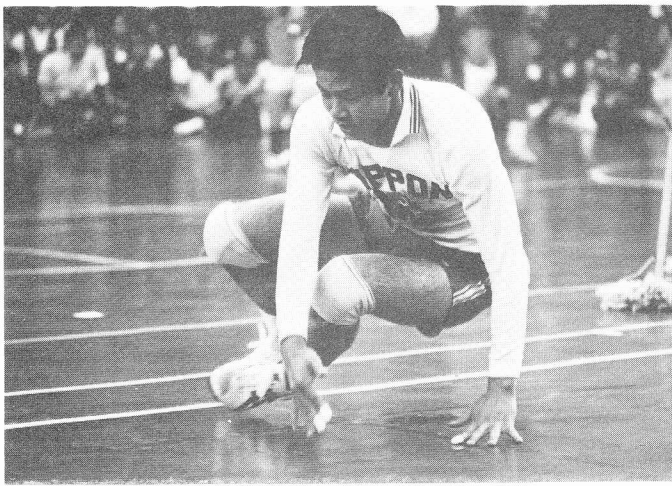
1. 3 metre pattern. Sprint 3 metres, lie on back, then to prone position facing right, roll to back, then to prone lying facing left. Sprint 3 metres backward. Then repeat. (Pictures 1, 2, 3, 4, 5)
2. Roll over forward and then dive backward. (Pictures 6, 7, 8, 9)
3. Knee high job (10 times). (Pictures 10,11,12,13)  
Quick stepping with toes and then sprint to the attack lines and touch lines with both hands.

In order to improve reaction-movement, we covered the net with a cloth similar to a curtain and drilled defence techniques or spiking at players who could not see the opponents movements. That was very effective.

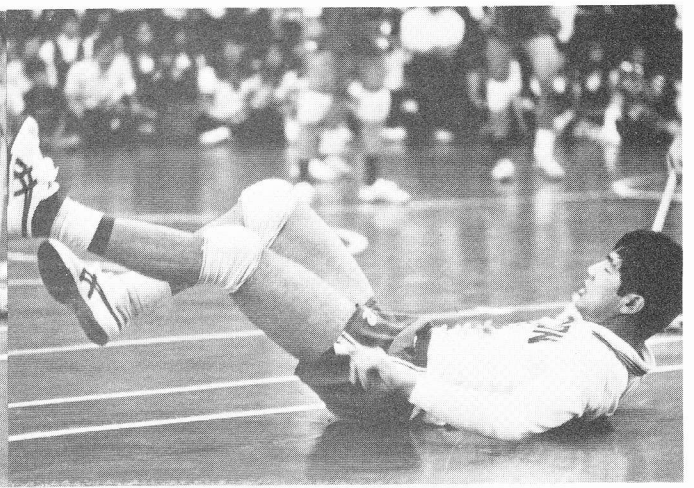


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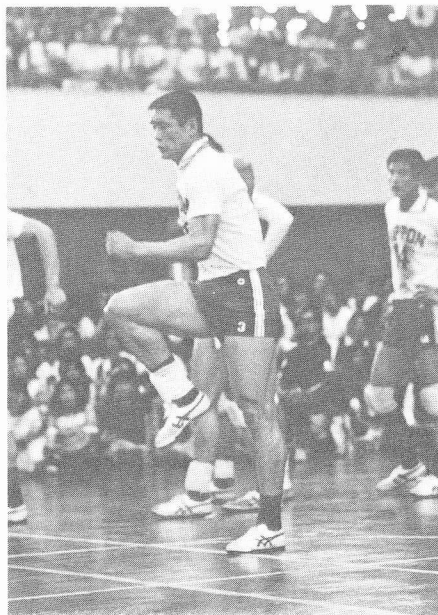
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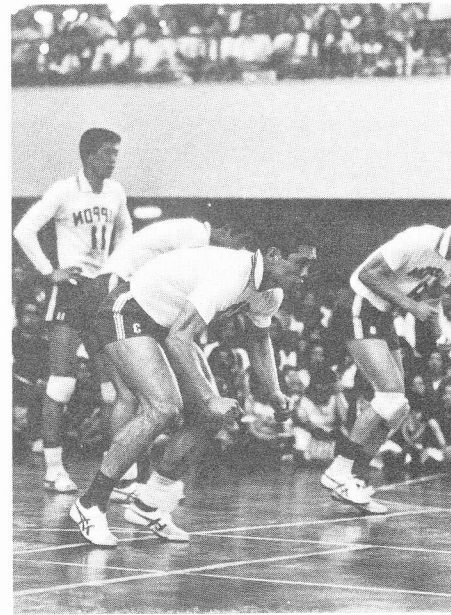
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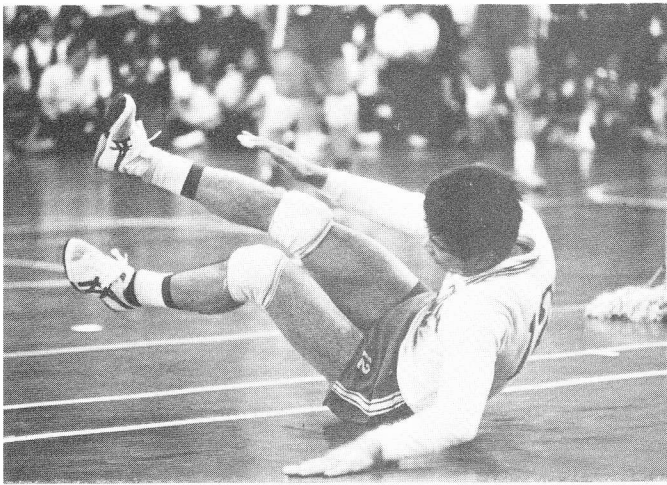
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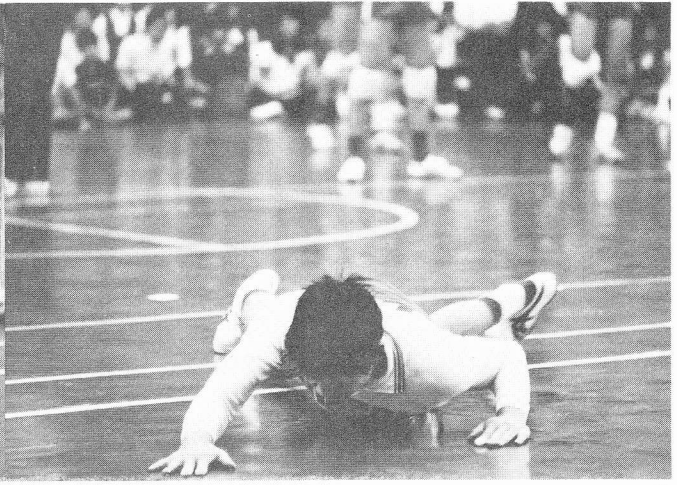
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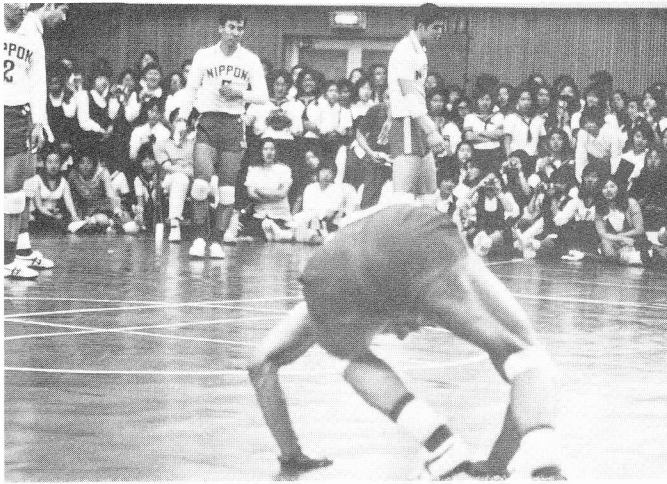
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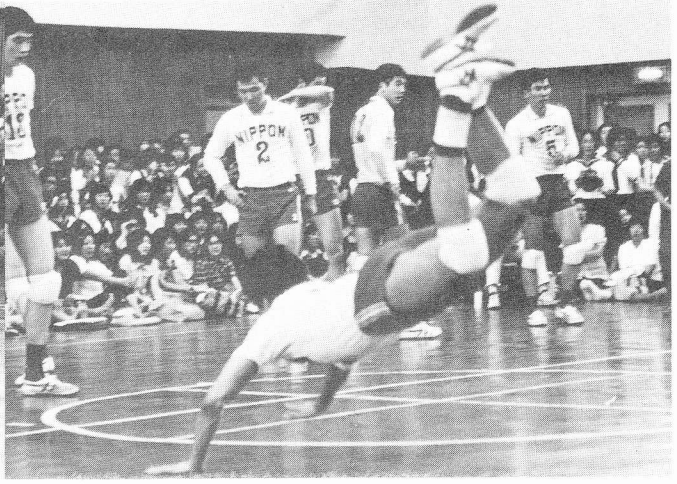
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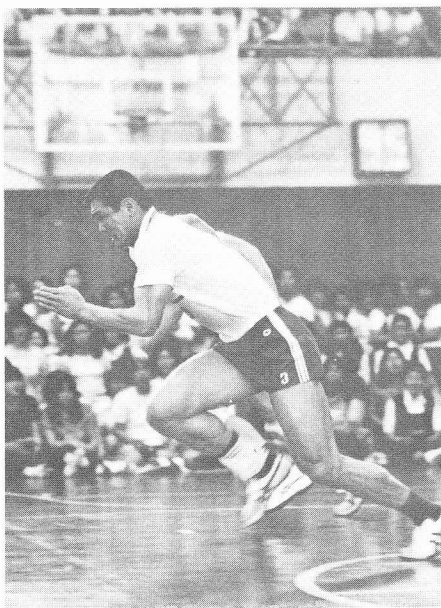
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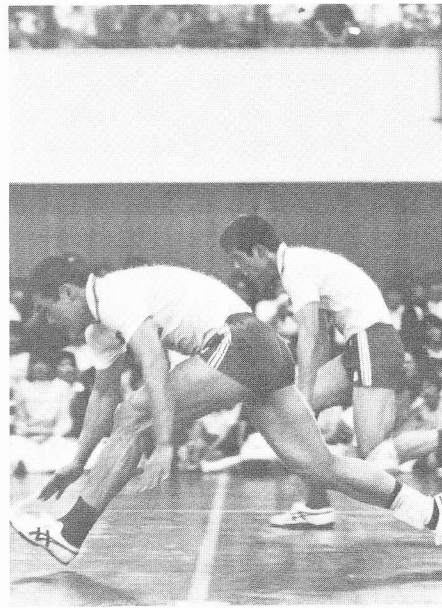
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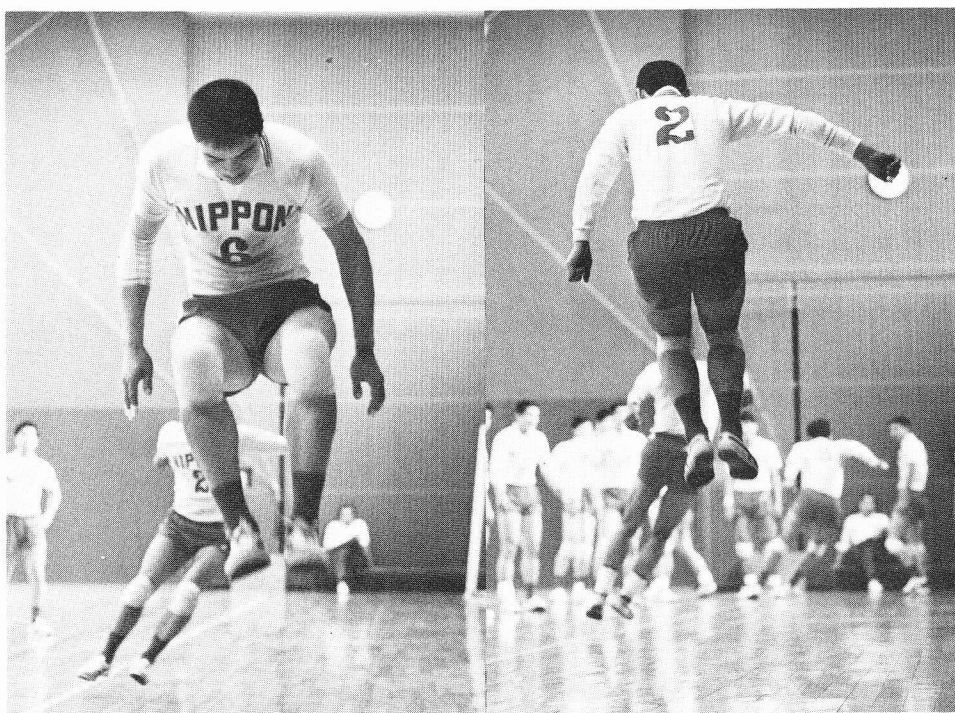


13

### Physical Training for Explosive Power:

1. Knee high jumping from Christiana Kick (on both sides).
2. Block jumping after using a cross-step pattern. Jumping with a partner on the opposite court. Jumping from forward cross-step and then from one step backward.

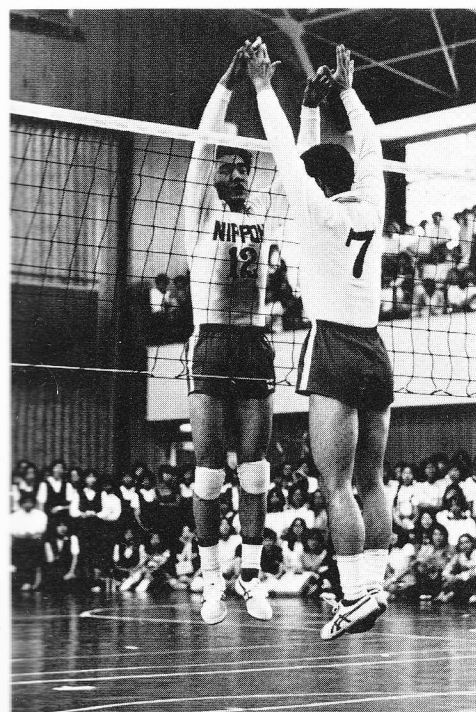
In addition to these drills, we used jumping over elastic cords with 3 kg sand bags, throwing the sand bag down during block jumping. The two different movements during block jumping are very effective in improving staying ability in the air. These three drills are done on the mat.



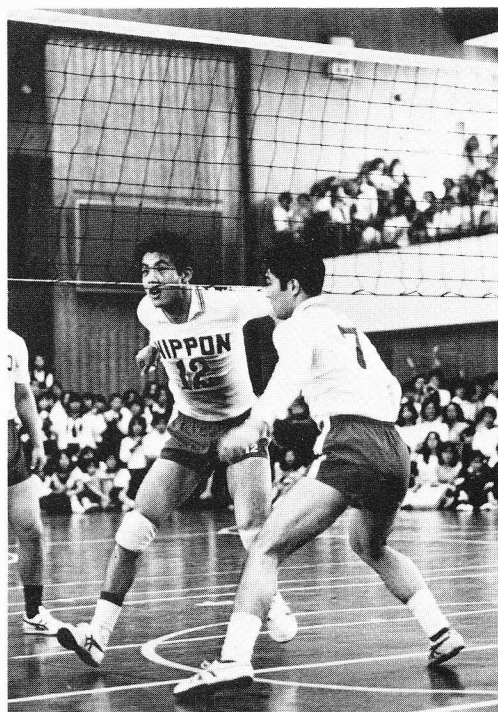
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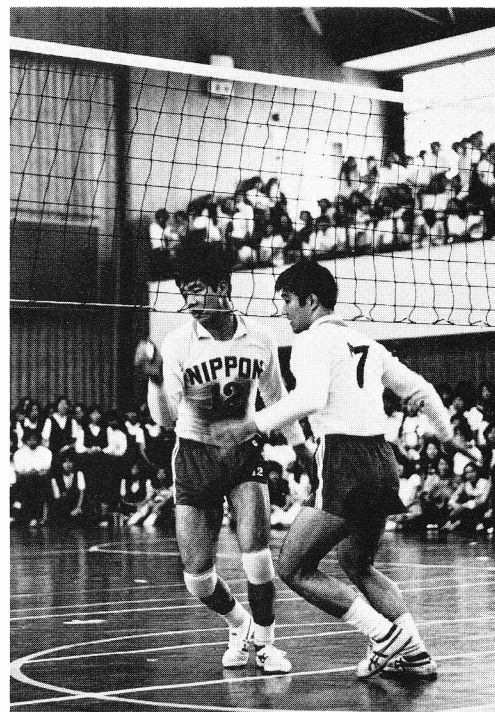




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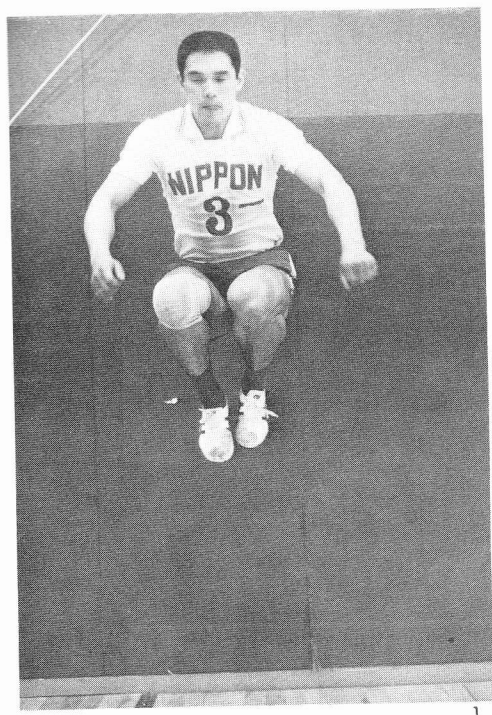
### Physical Training for Endurance:

Endurance consists of total endurance which involves circulatory and respiratory organs and local endurance which involves muscular endurance. We have many methods to improve endurance. One of these is the exercise in succession, called volleyball gymnastics. We have improved the stamina of the players with this exercise, which includes all the movements required for volleyball.

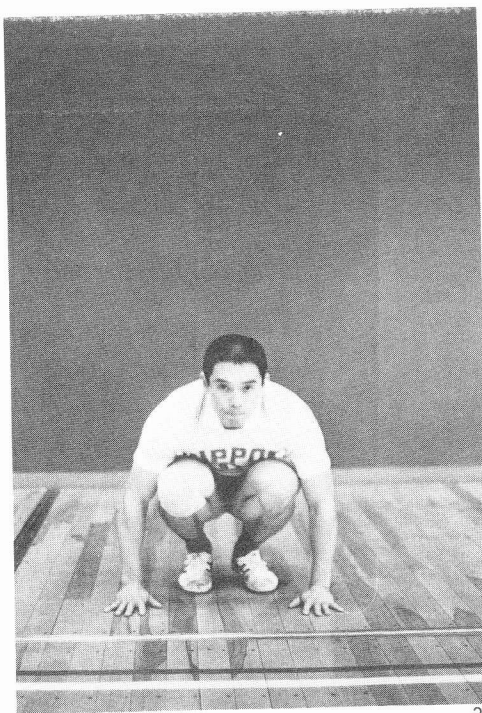
The training I am going to show you was a part of the third step. It took players approximately 35 seconds to complete the first step, and 55 seconds to do the exercise well at the third. That number of items in the exercise does not differ between the first one and the third. Consequently, you can see how great the quantity of movements in the third one is.

I was very surprised to find many players whose pulse rates were over 160, 170 and 180 at the beginning of the third exercise. They had done the first and second exercise for a long time but nevertheless showed too high a pulse rate. At first I doubted that we could have made a mistake when we felt their pulse, but it was true. That also accounted for the high number of movements that had been beyond my expectations.

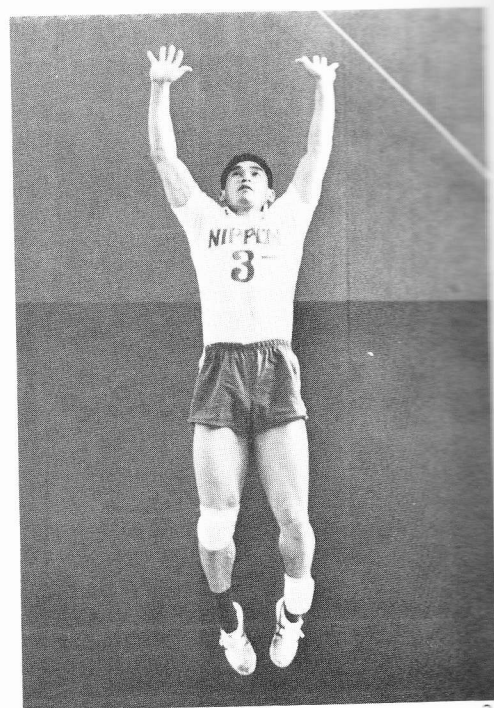
I tried to make them do the exercise as quickly as they could, even if they did it inaccurately or awkwardly at the beginning. Gradually I made them do it with accuracy as well as speed. That is, they are required to do a large number of accurate and speedy movements during their exercise.



1

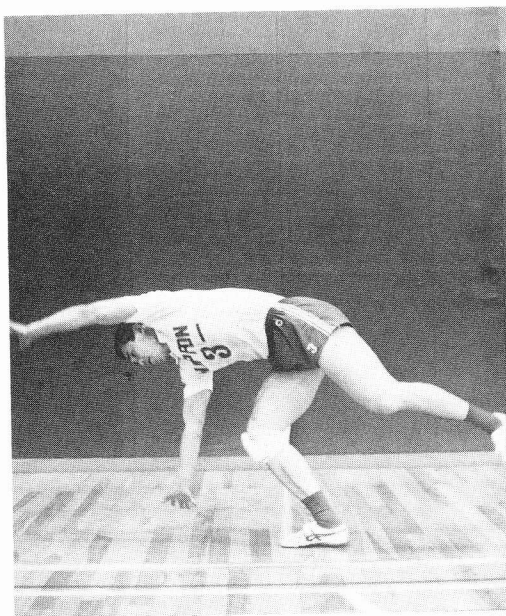


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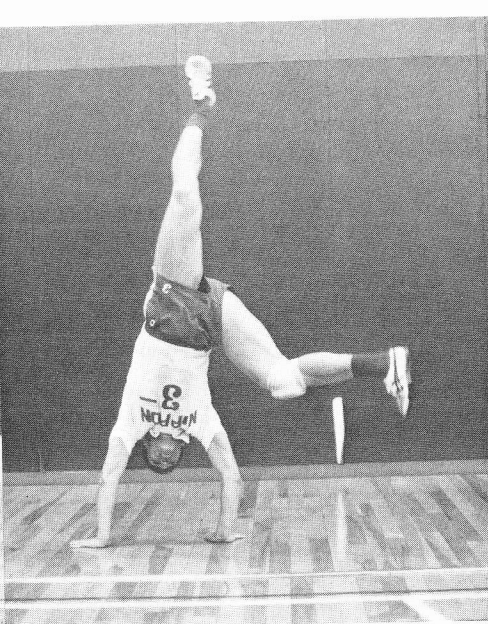


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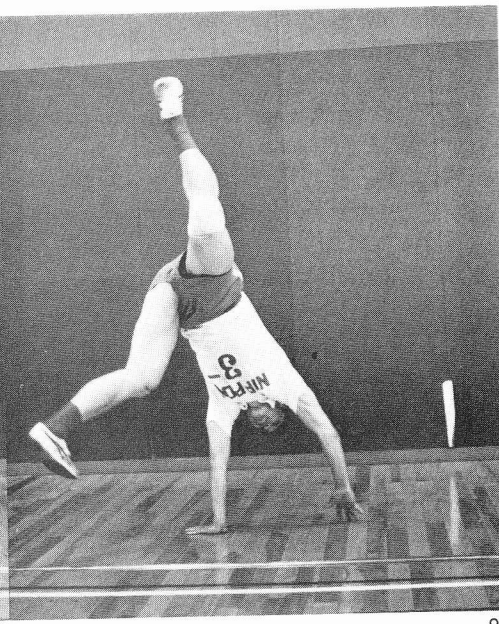
Tuck jump — side to side. 3 times. (1)  
 Deep squat — jump — stretch body in the air. 1 time.  
 (2, 3)  
 Squat thrusts, then deep squat jumps. (4, 5, 6)



7

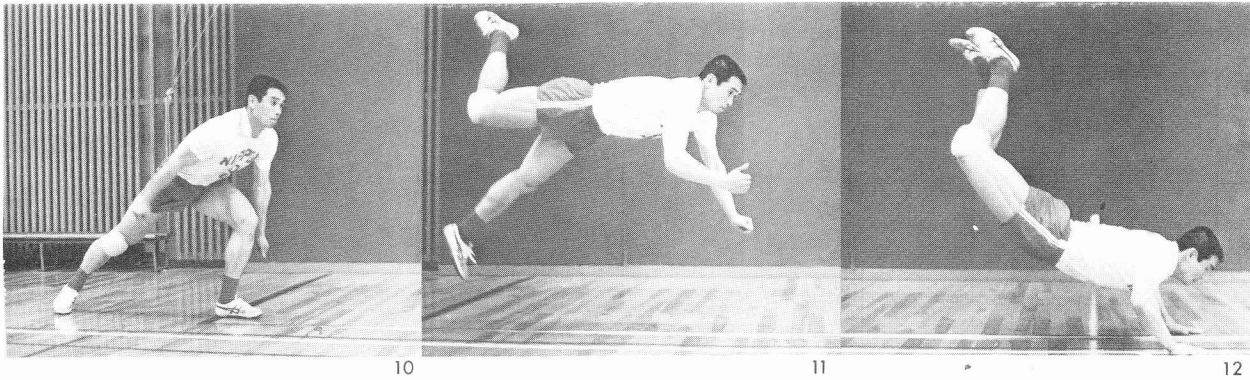
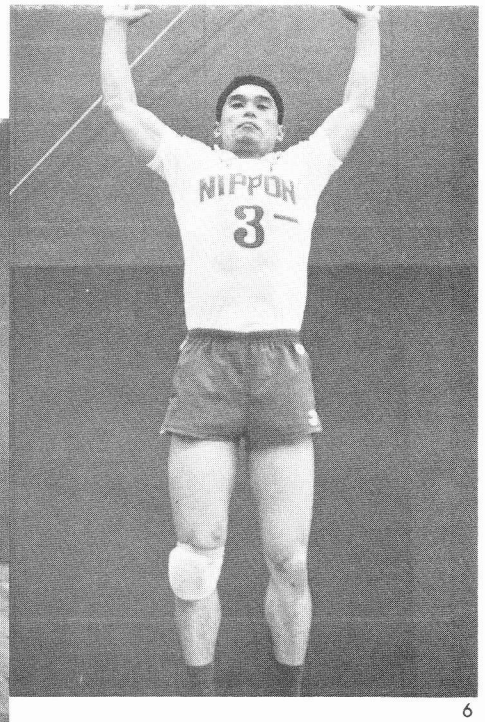
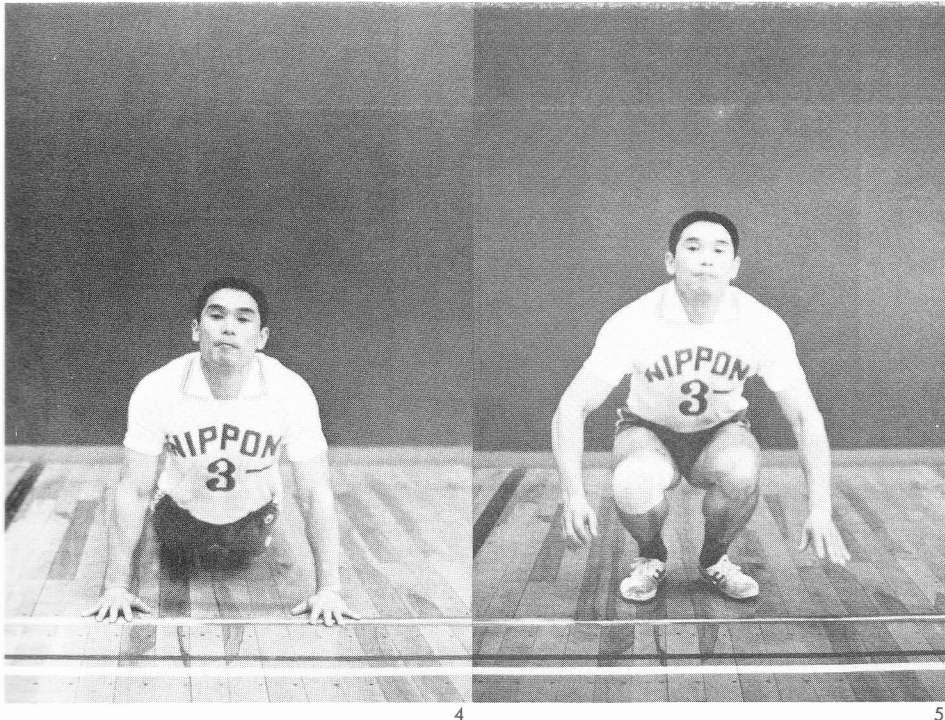


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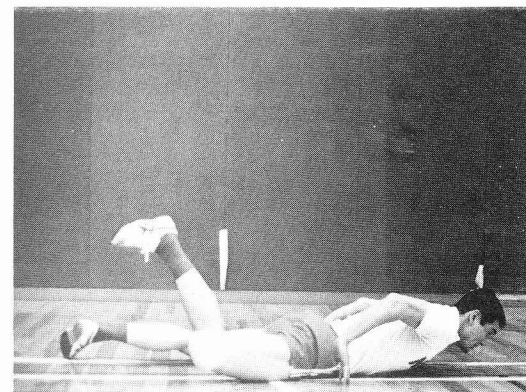


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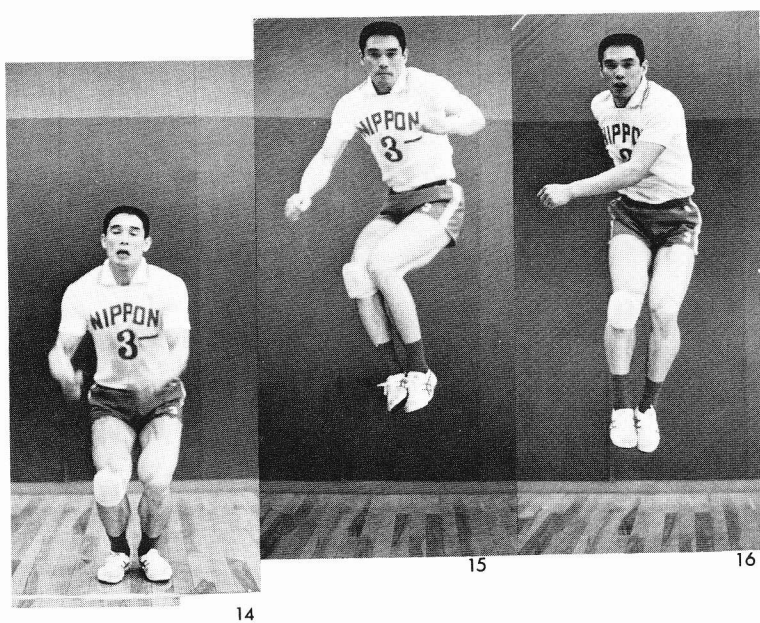




Cartwheel to right side. 2 times. (7, 8, 9)  
 Dive to left side. Once. (10, 11, 12, 13)  
 Cartwheel to left side, twice.  
 Dive to right side, once.



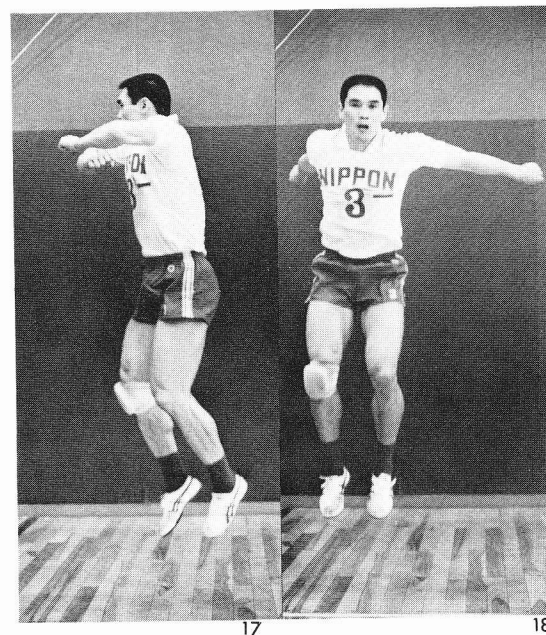




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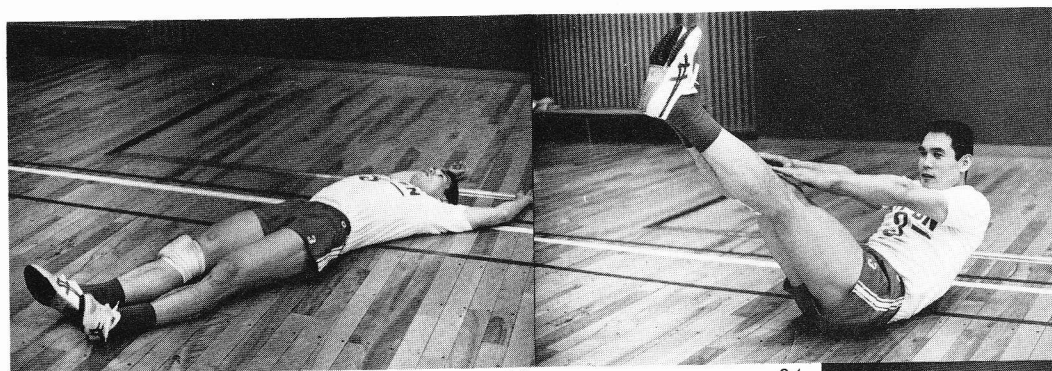
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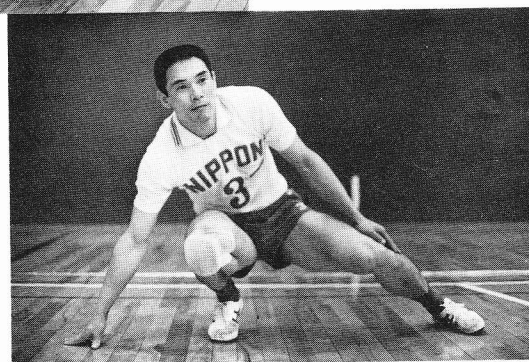
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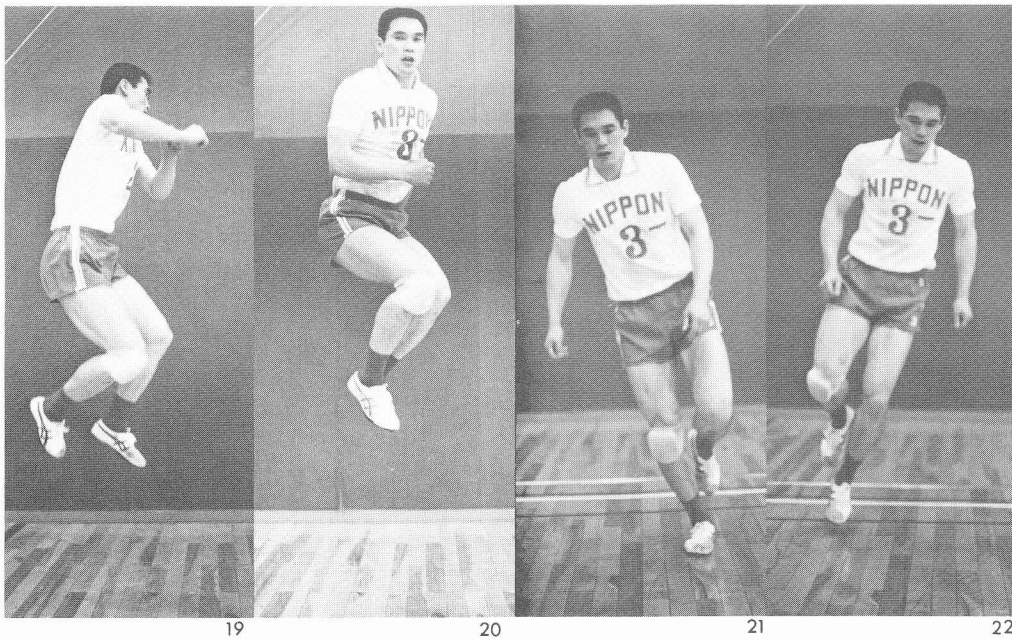
Jump twist — centre the body. Twist as many times as possible in the air. Do twice. (14, 15, 16)

Tuck Jump — changing to right side, then left side (180°) (17, 18, 19, 20)

Jump, left foot back, zig-zag. 3 steps. Switch to right foot, 3 steps. (21, 22)

V sit-ups. 3 times. (23, 24)

Right side step, touch the floor, proceed to stand up, touch right knee, right shoulder and jump clapping hands. (25, 26, 27, 28, 29)

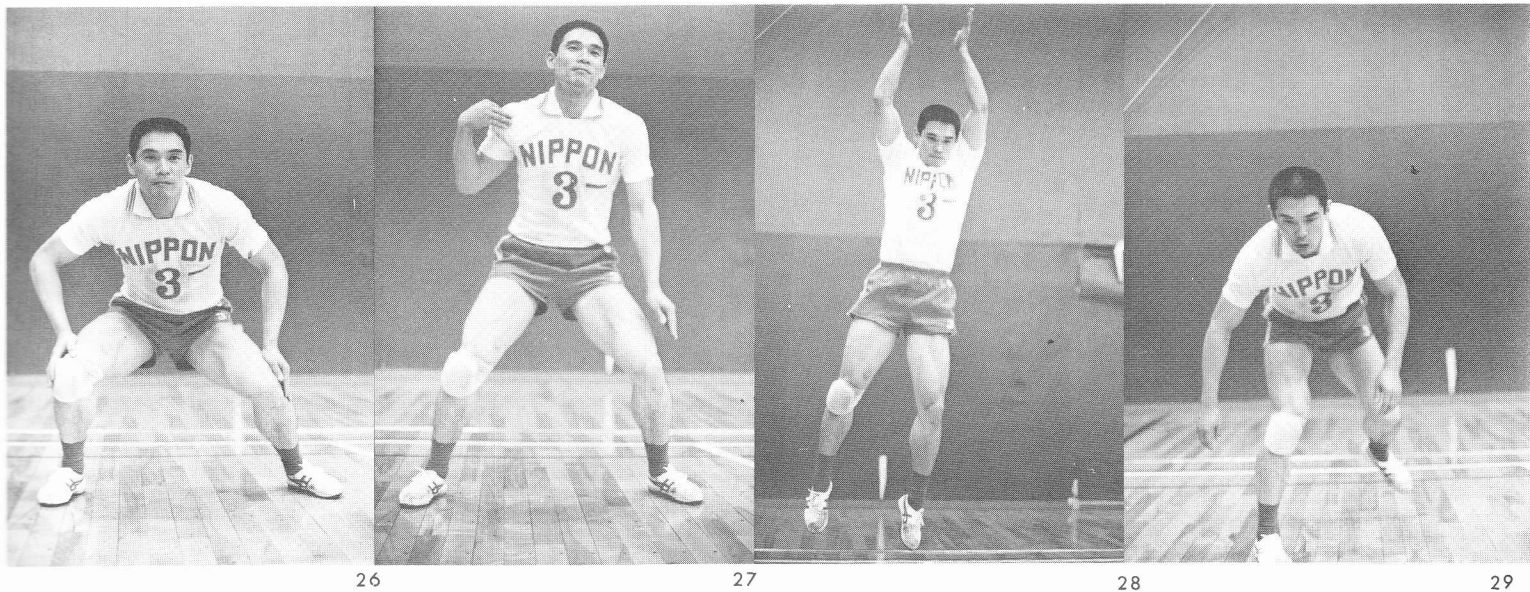


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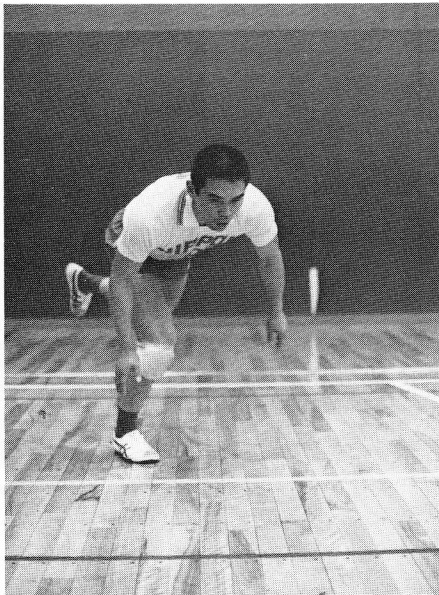
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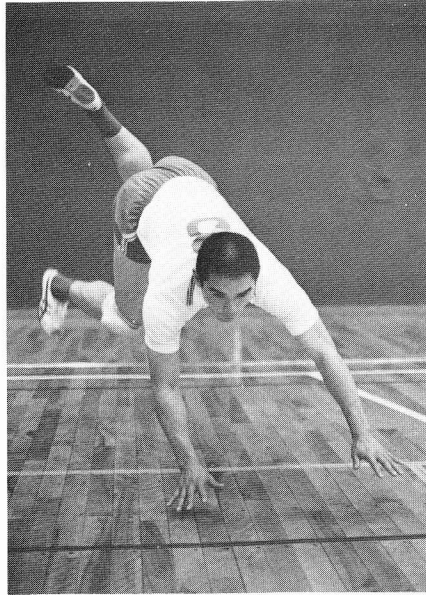
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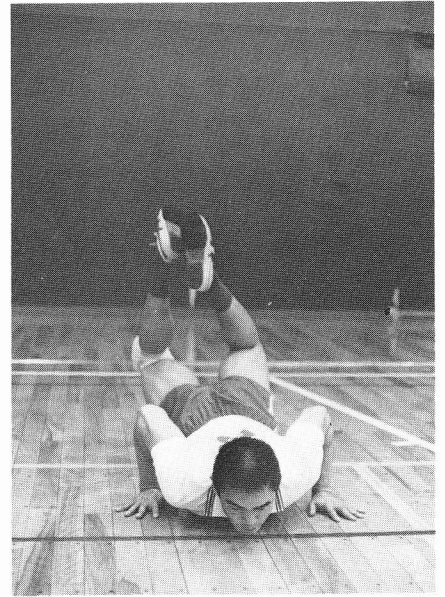




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Step to right, to left. Dive to right side. (30, 31, 32)

Left side step, touch the floor, proceed to stand up, touch left knee, left shoulder and jump clapping hands.

Step to left, step to right, dive to left side.

Lying on floor, face down, log roll to right and left up to 3 metres. (33, 34, 35, 36)

Hand-foot co-ordination exercise:

Left hand to right foot in front. (37)

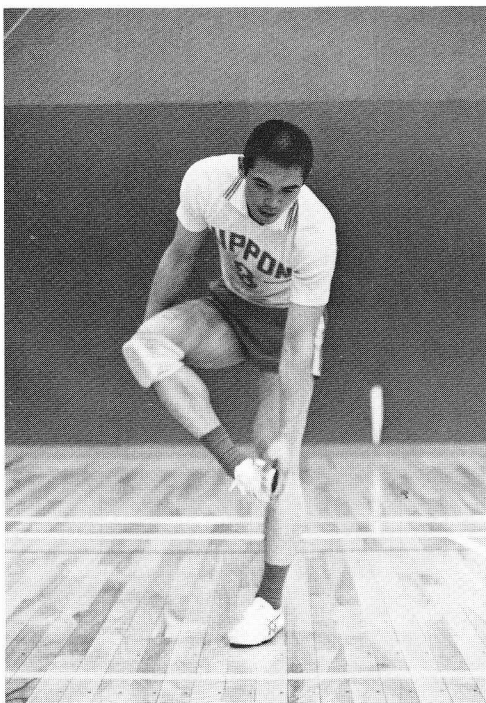
Right hand to left foot in front. (38)

Left hand to right foot behind. (39)

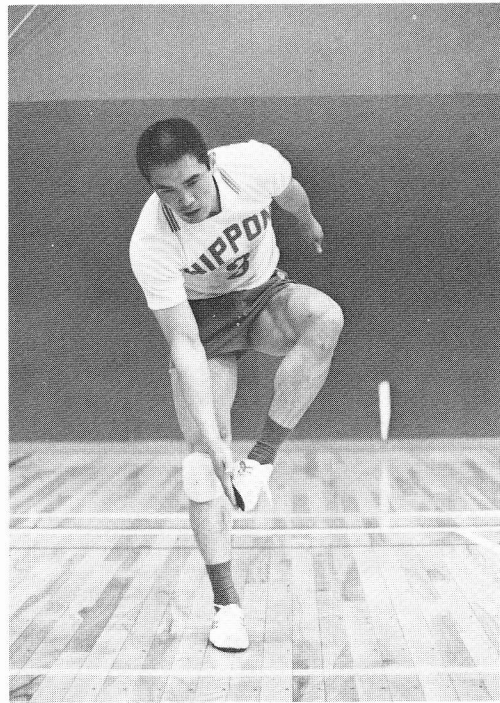
Right hand to left foot behind. (40)

Moving forward, do as many repetitions as possible until you have taken 8 breaths.

Diving forward once. (41, 42)

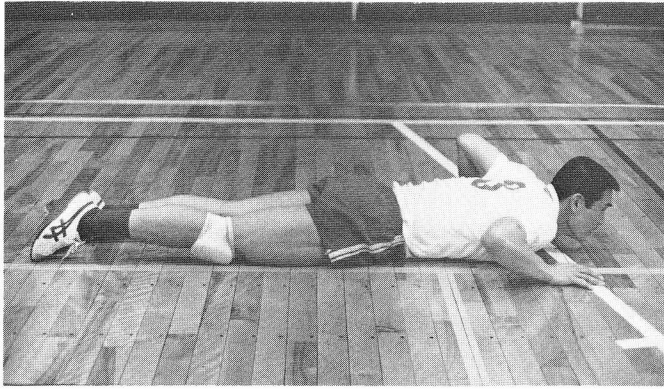


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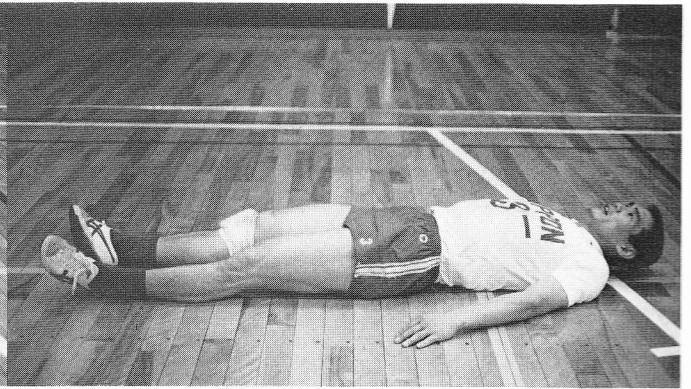


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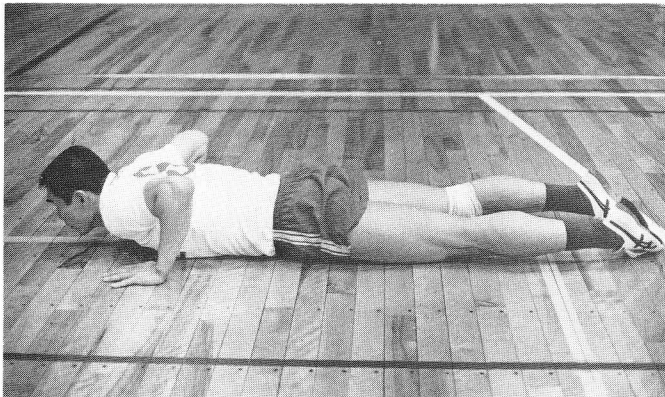




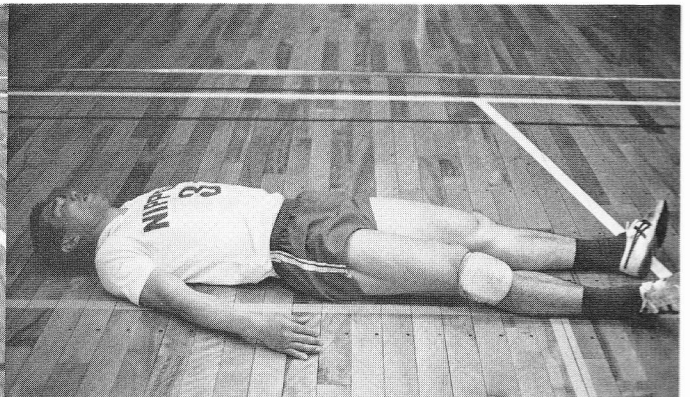
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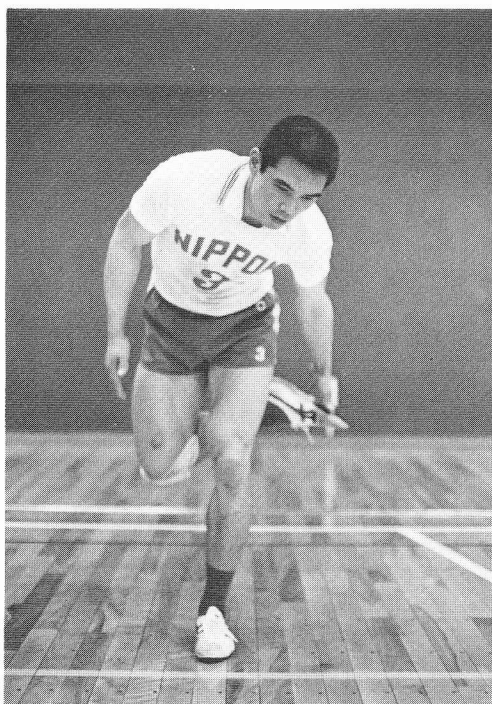
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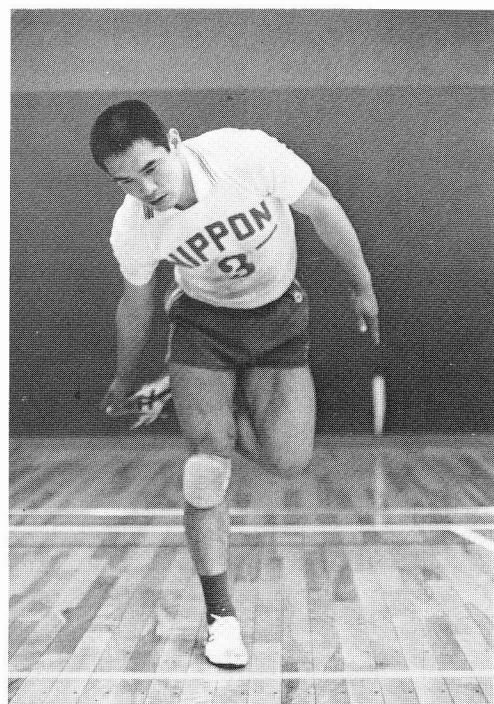
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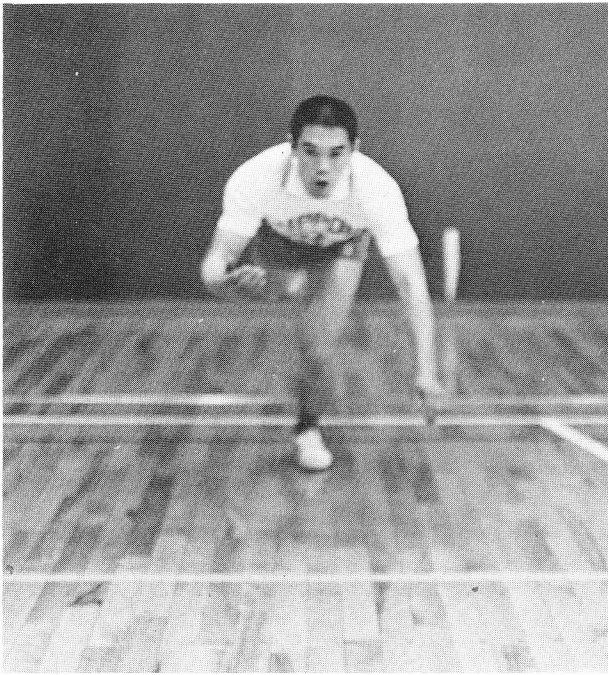
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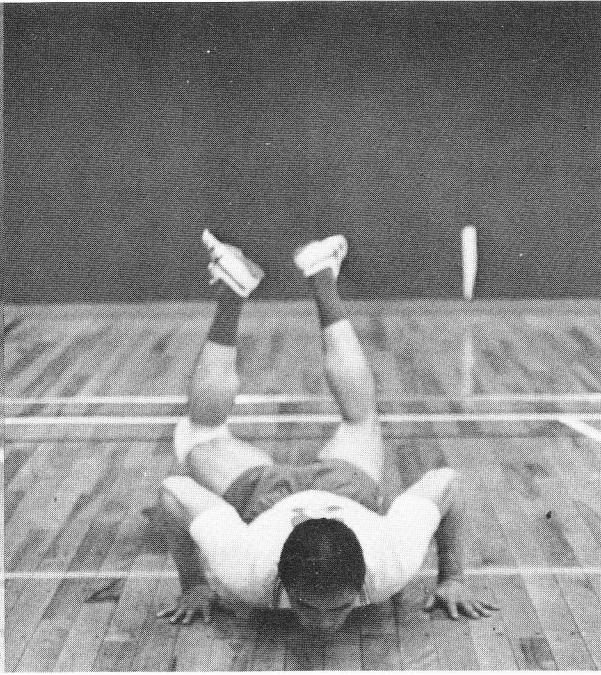
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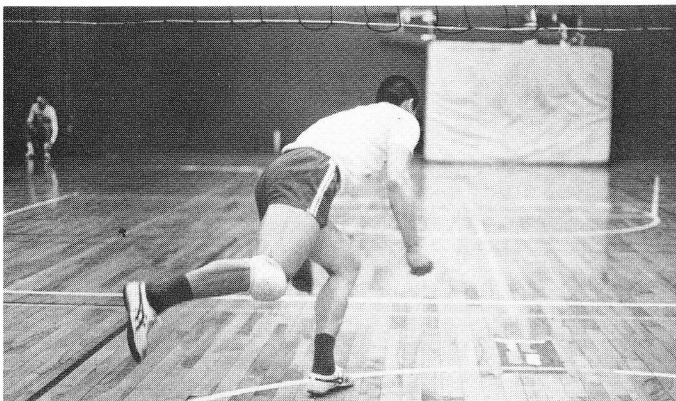


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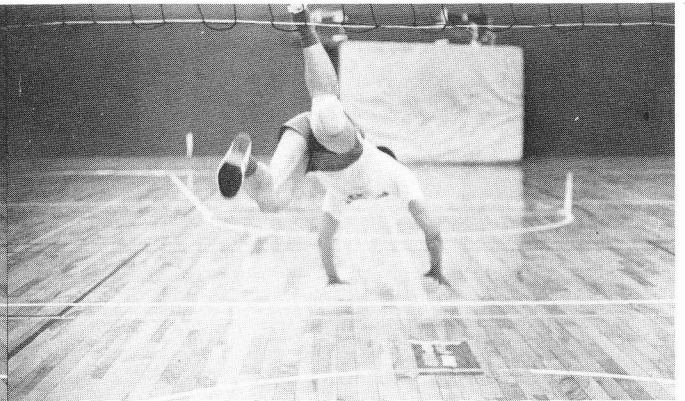


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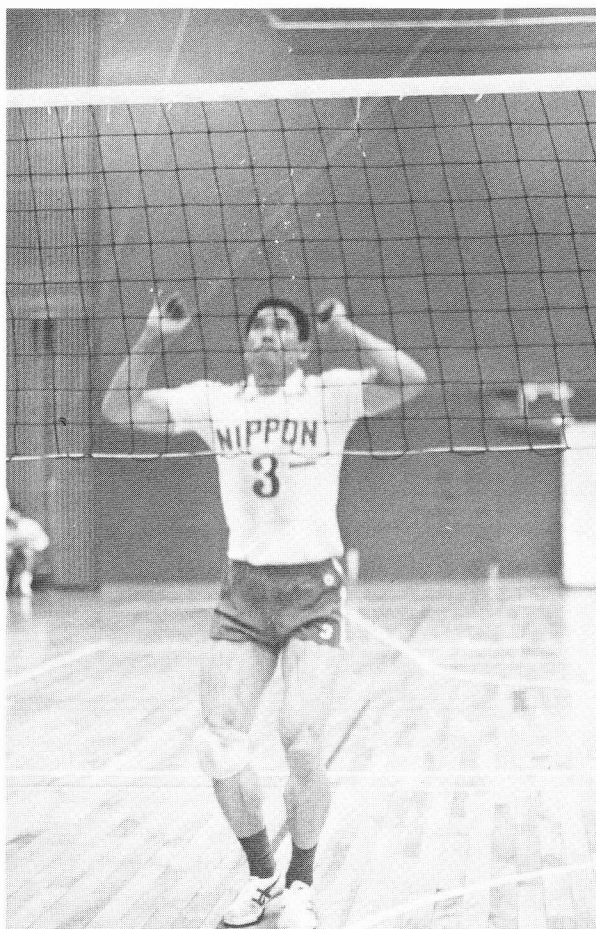
Blocking at the net once and take one step to the right, block again. Turn to the left and dive back away from the net. (43,44,45,46)



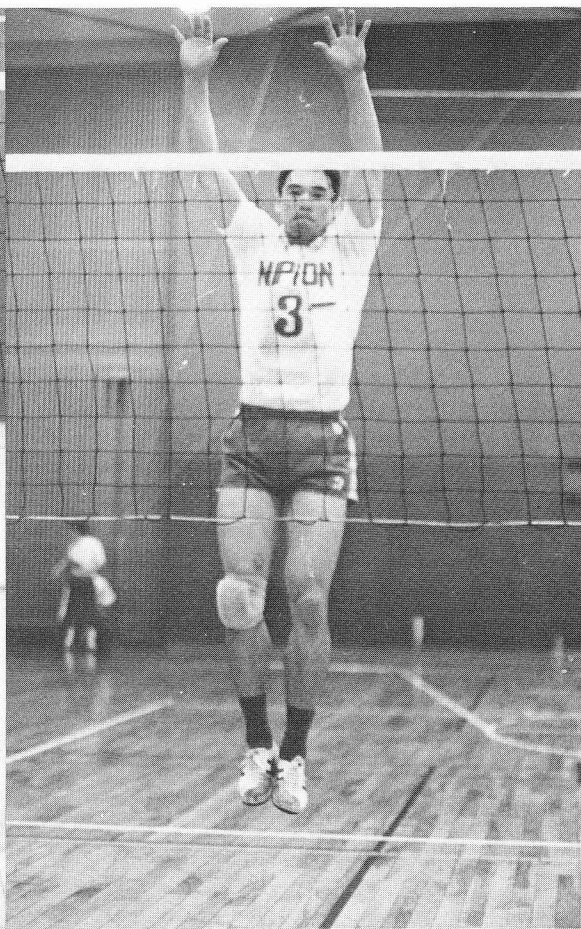
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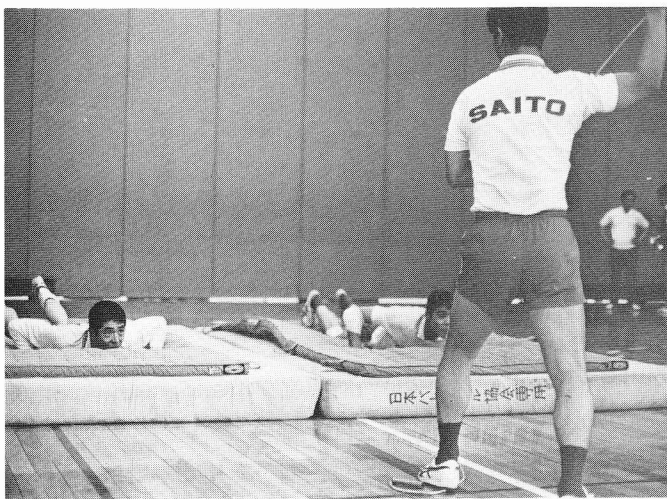


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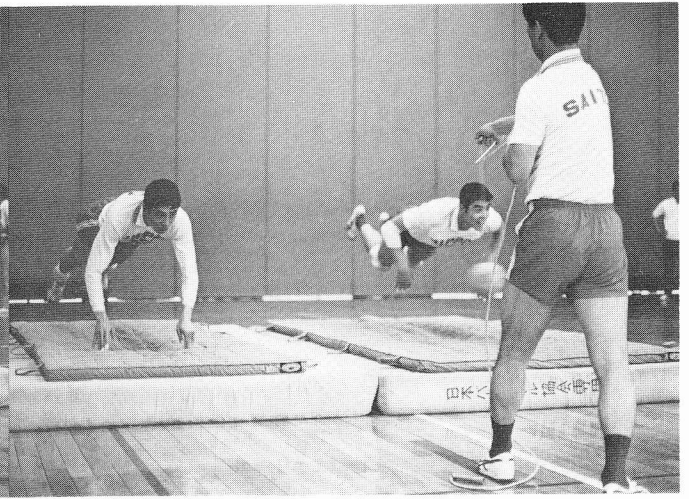
### **Physical Training for Co-ordination:**

The players of the National team have been trained with exercises on the mat, walking on the hands, the complicated rhythm movements and so on, to improve timing, balance, rhythm, relaxation and concentration. I think the training with the help of a swinging ball is the best method for improving co-ordination. As it is done on the thick mat, they are not exposed to injury. The mat also helps them improve the explosive power of their muscles.





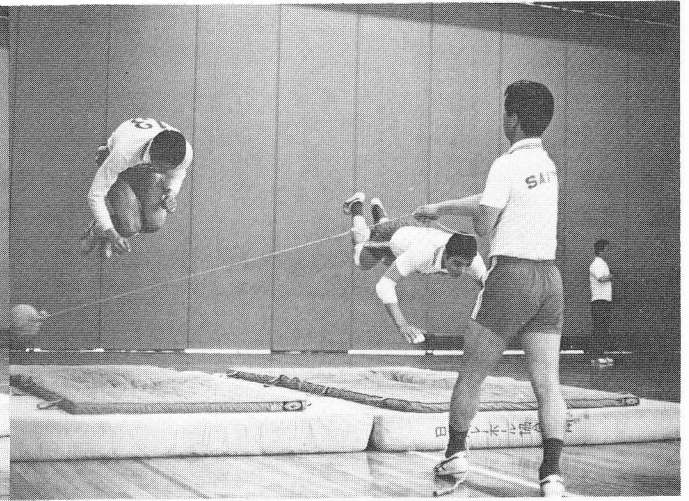
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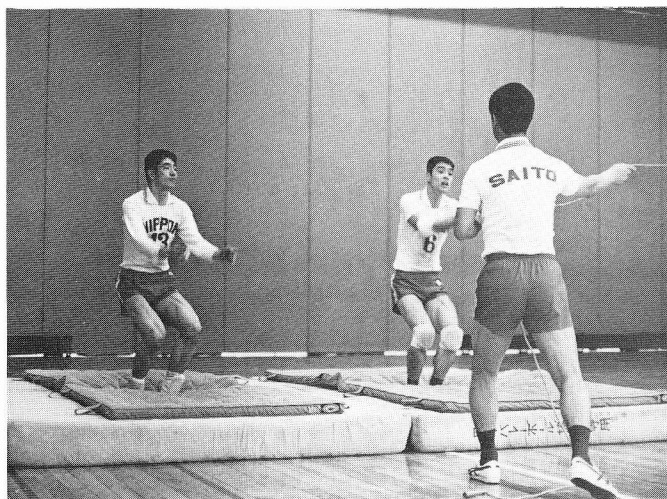
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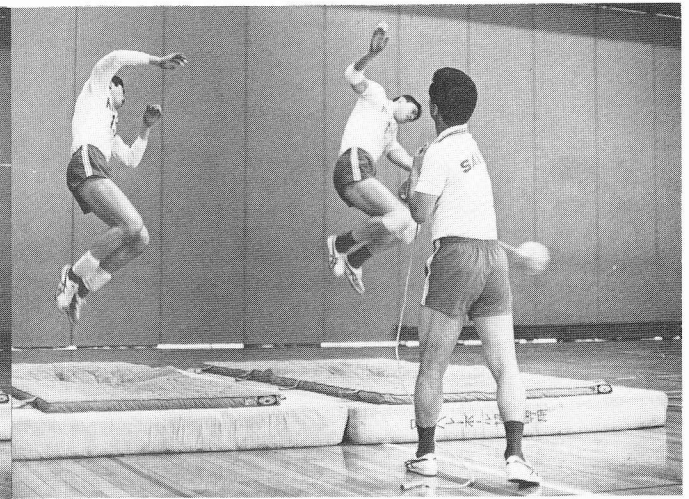
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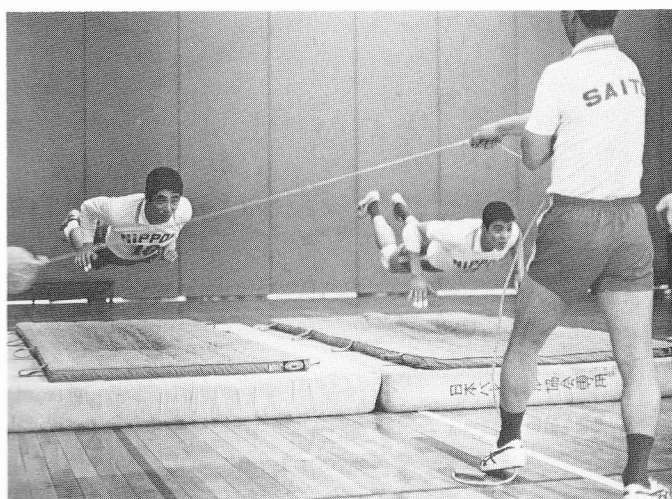
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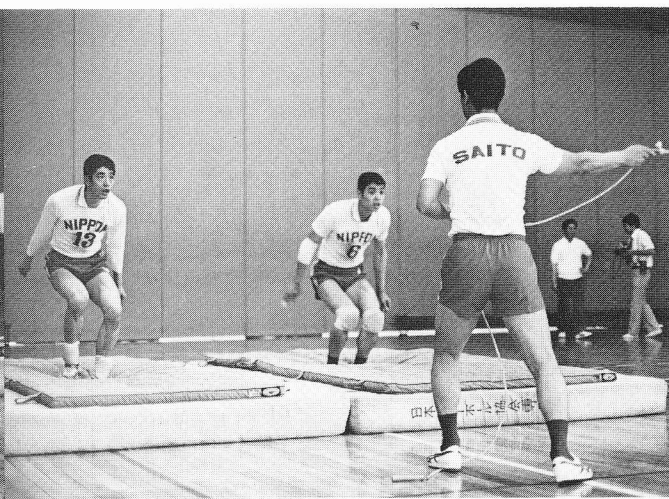
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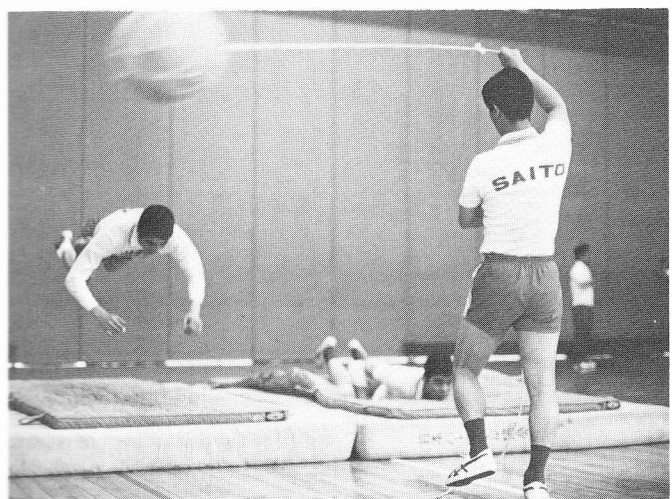
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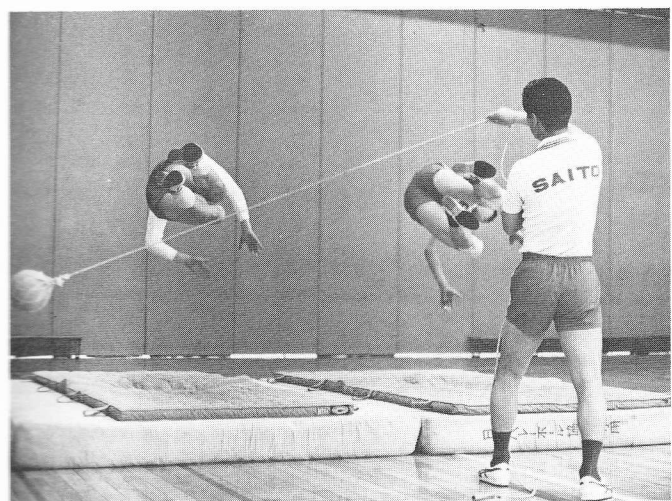


7

Lying face down on mats, trainer swings ball and player has to leave mat so that the ball passes between the mat and the player. (1, 2, 3)

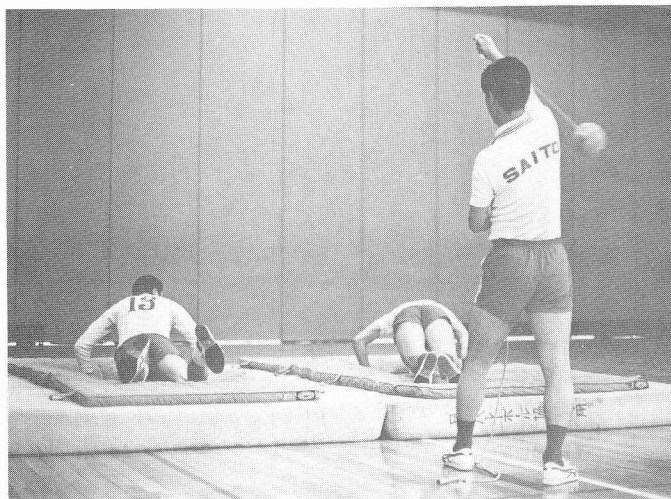
Standing position on mats. Leap up, turn 180 degrees in air and land in diving position. (4, 5, 6, 7)

Standing position on mats. Leap up, turn 180 degrees in air and land in diving position. Turn once to right, once to left. (8, 9, 10, 11, 12, 13, 14, 15)

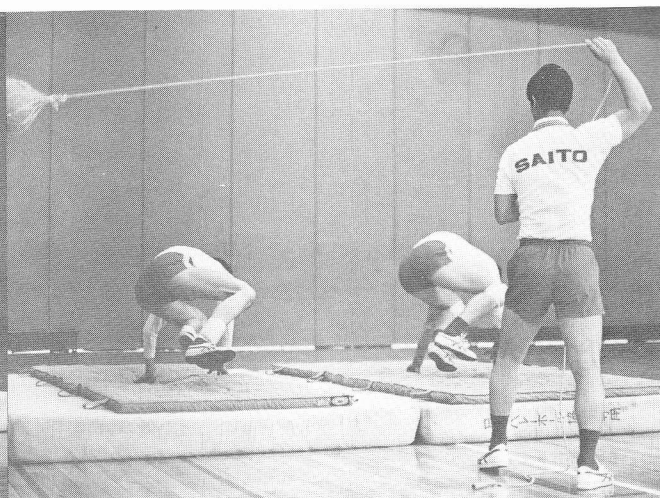


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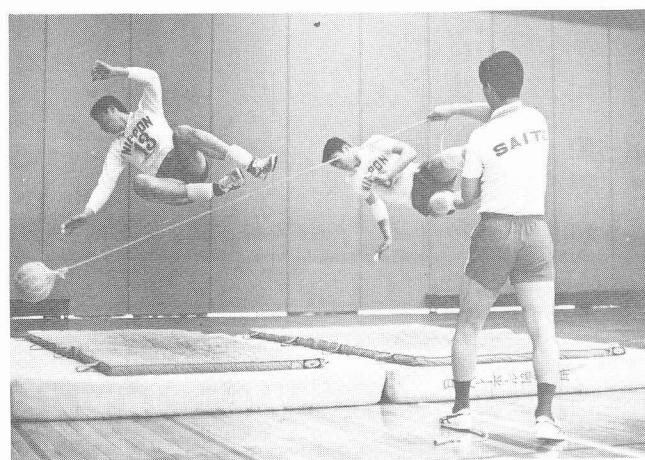




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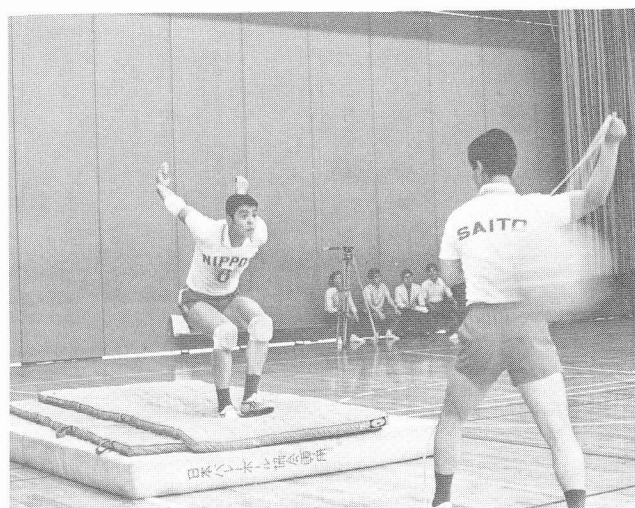
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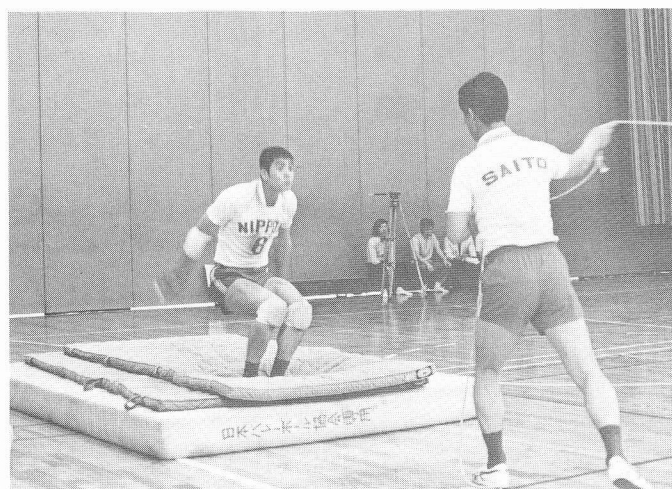
15

Backward hand-spring — let ball pass between player and mats. (16, 17, 18)

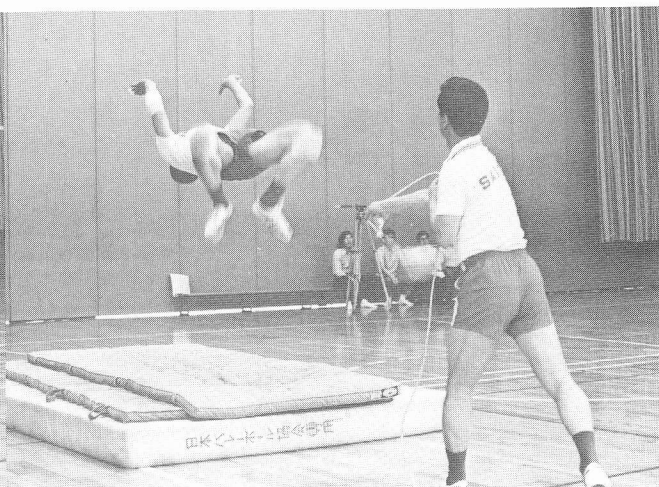
Backward somersault. Let ball pass between player and mats. (19, 20, 21, 22)



16

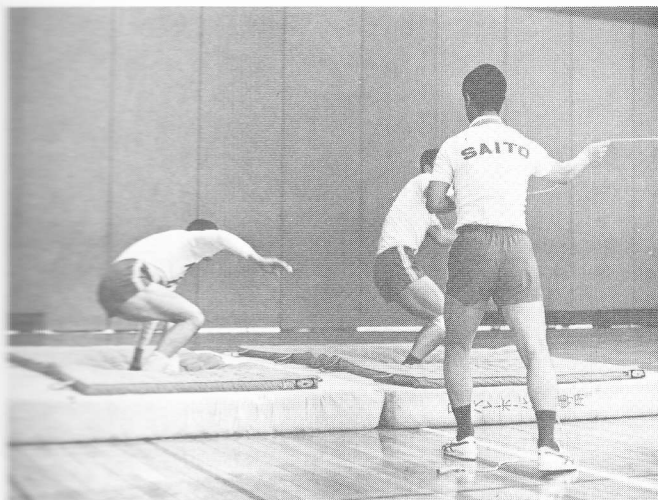


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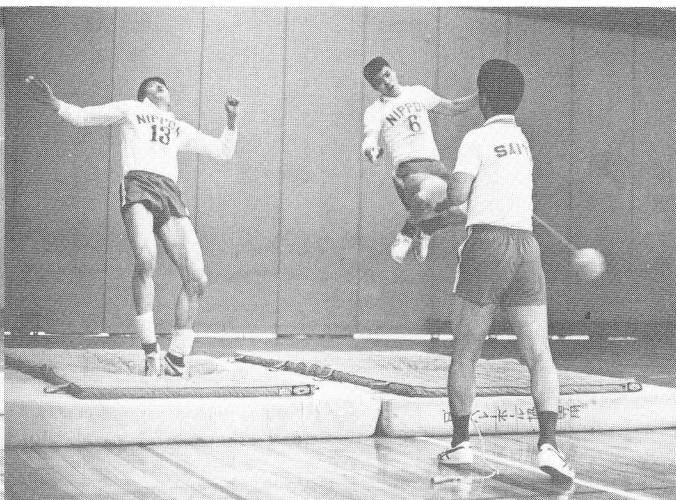


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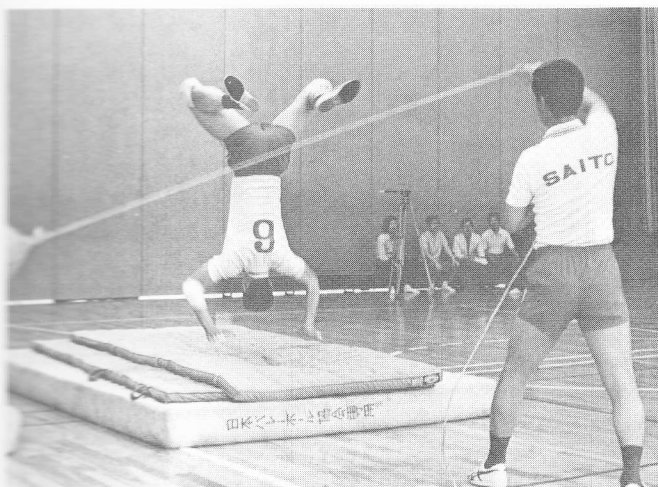




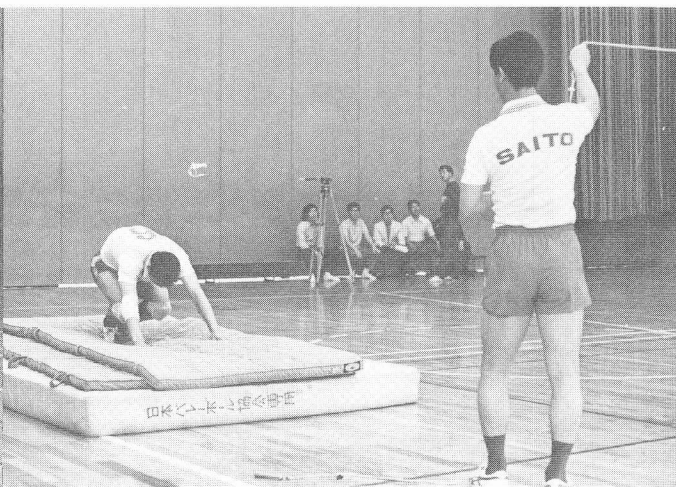
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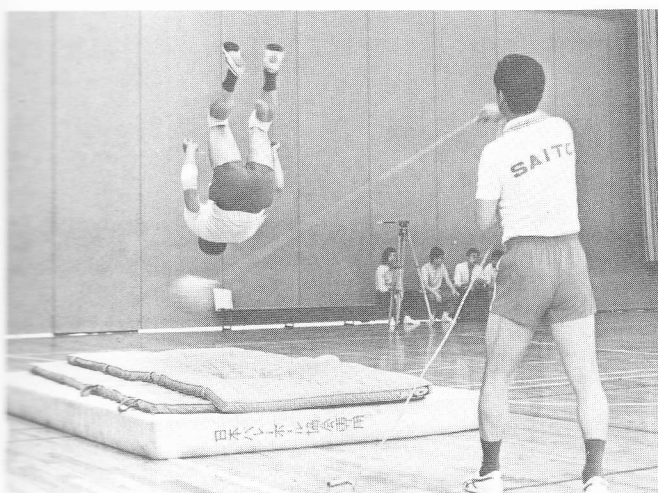
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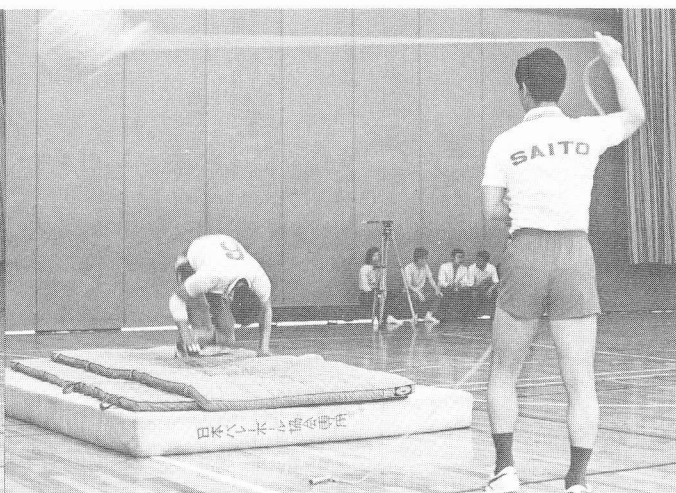
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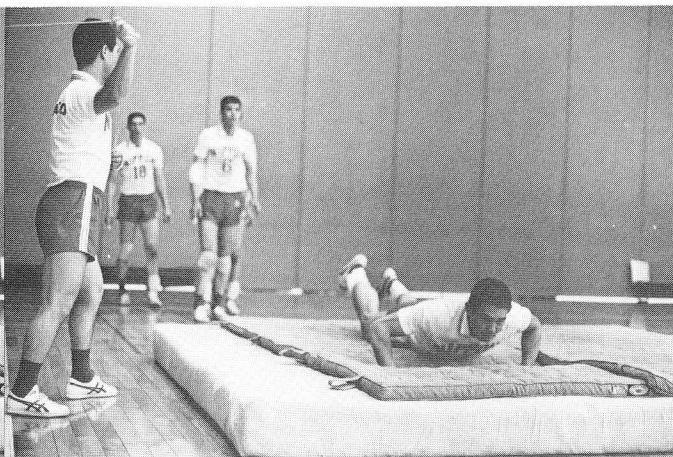
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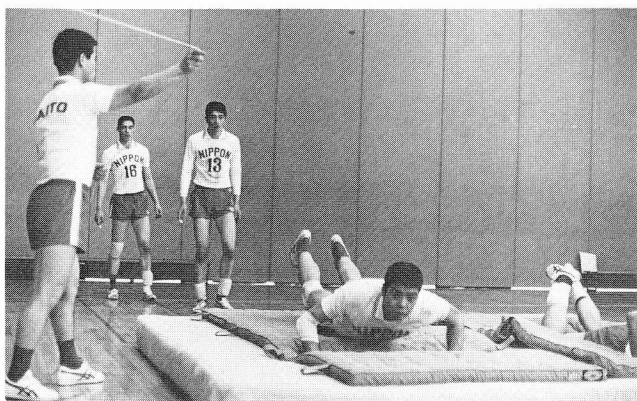
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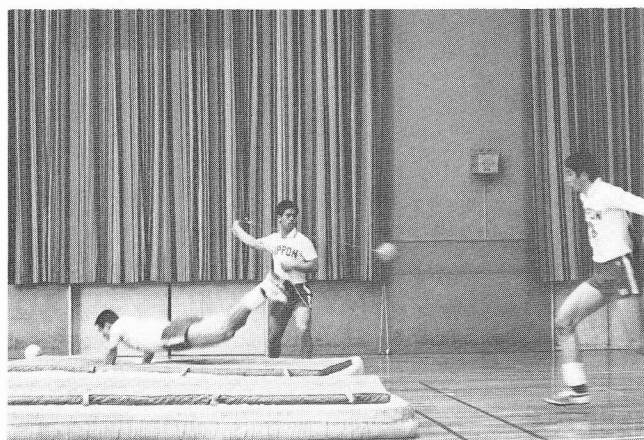
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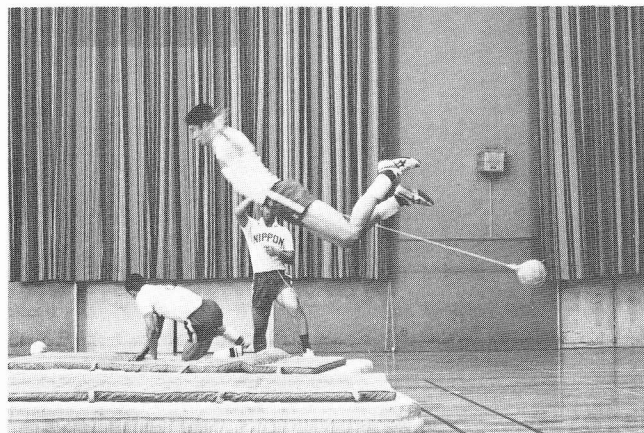
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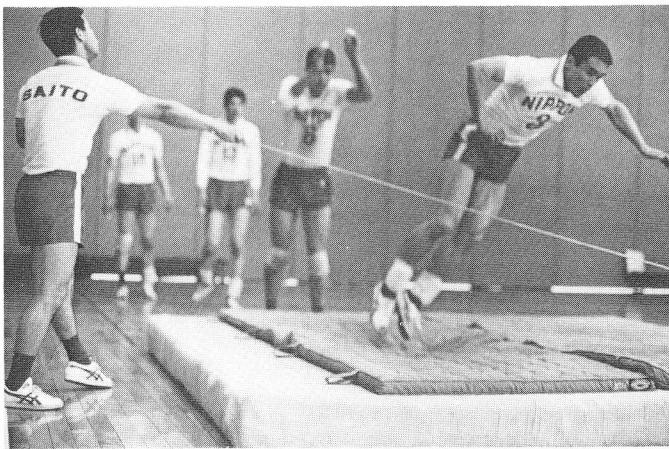


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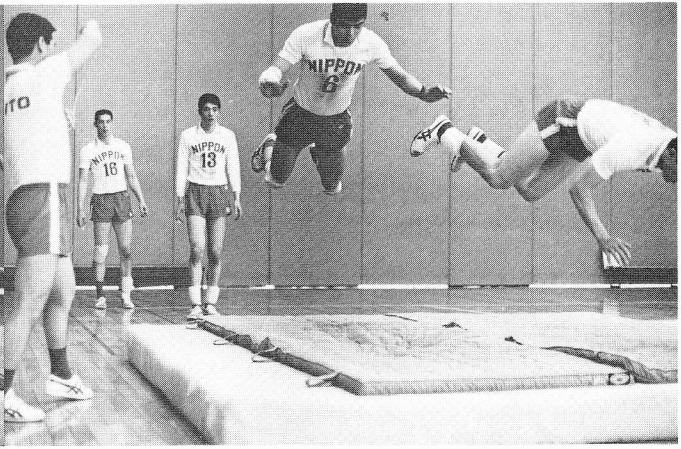


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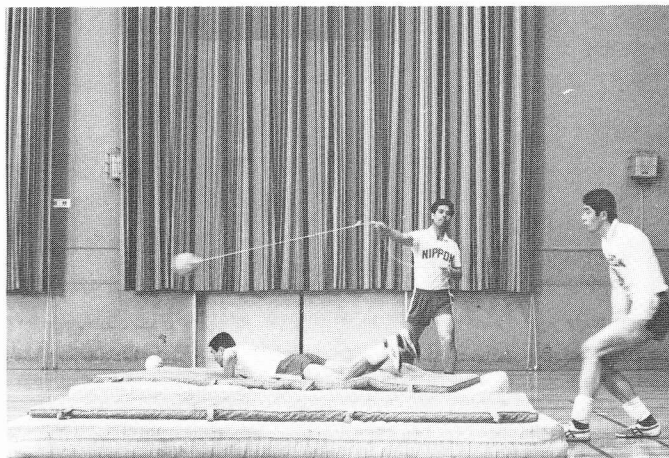




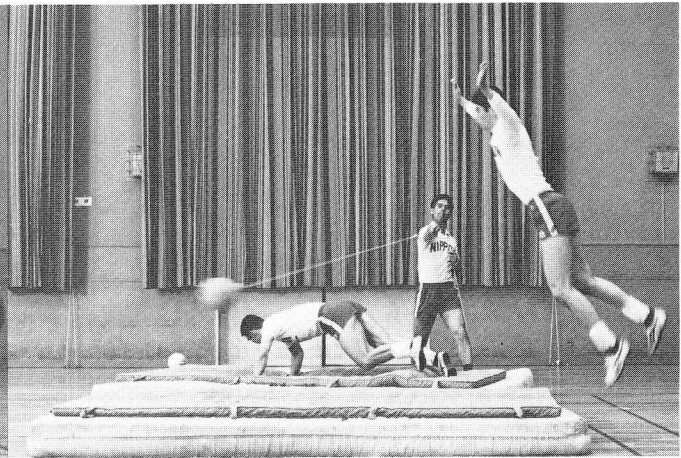
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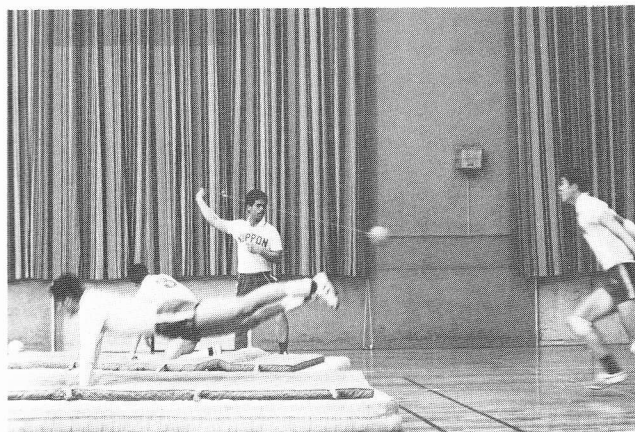
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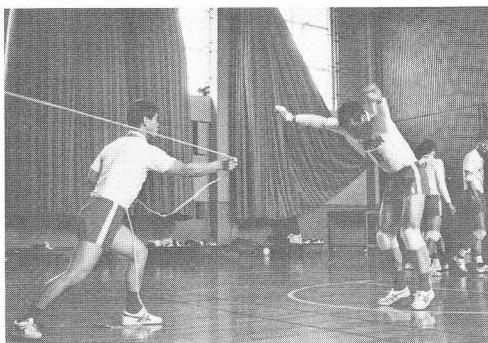


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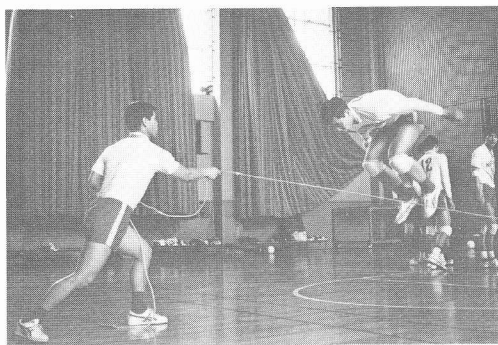
Dive backward from standing position. Let ball pass between player and mat. Next, dive to opposite side from trainer while another player starts the routine. (23, 24, 25, 26, 27)

Line mats up in a V shape. Players jump in figure of a Y, one player jumping to the right the next to the left. Jump must be high with the body stretched. (28, 29, 30, 31, 32)

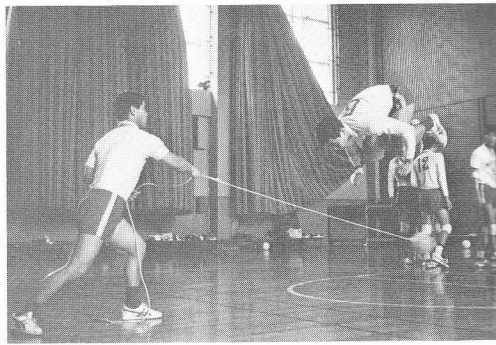




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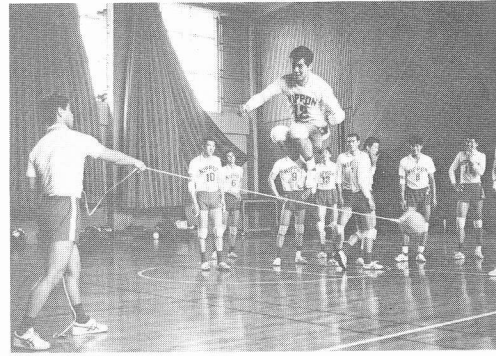
Same as before, but without mats.



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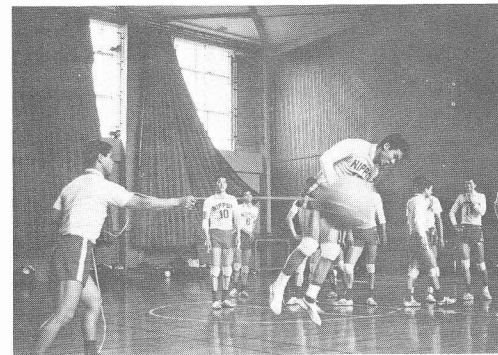
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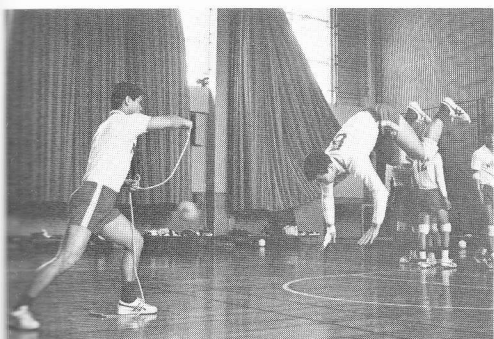
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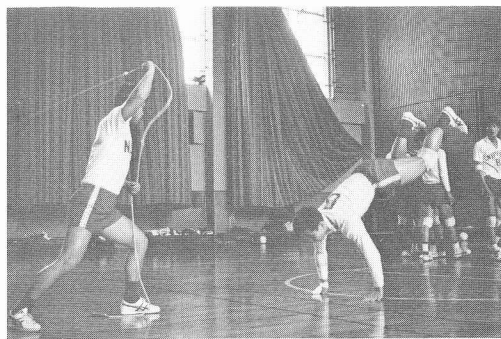
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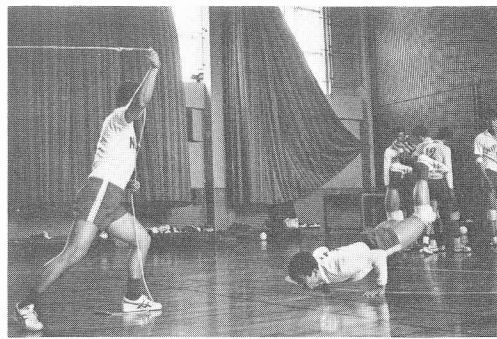
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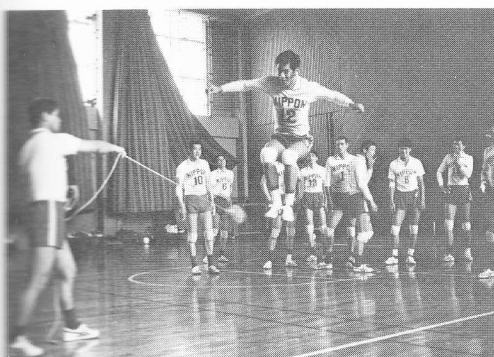
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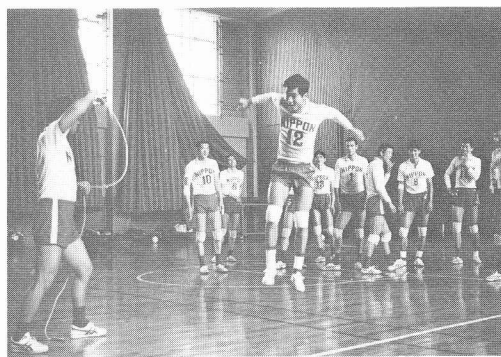
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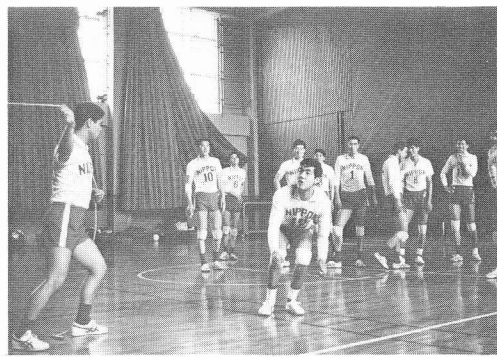
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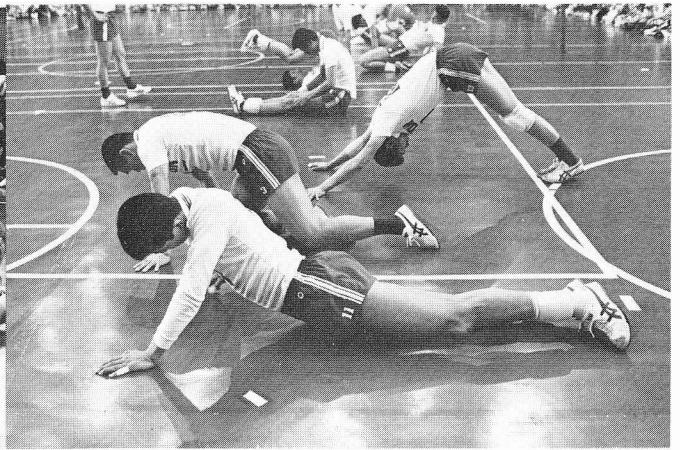


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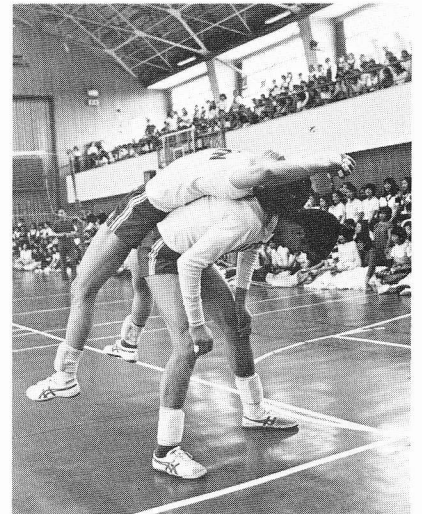


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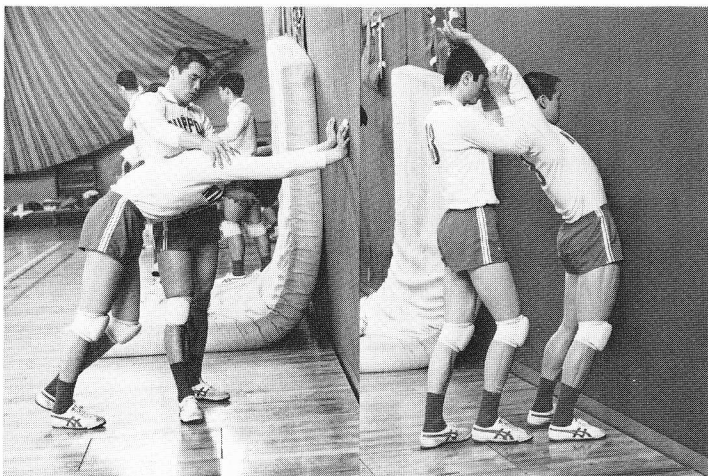
### Physical Training for Flexibility:

It is very important to improve flexibility in order to prevent injuries and to improve our techniques and skills. Flexibility is comprised of static and dynamic flexibility. Static flexibility is flexibility while doing exercises, dynamic flexibility is that found when playing and moving with the rhythm of the sport. I sometimes find the players who are very good at dynamic flexibility, although very poor at a static flexibility. They have good dexterity but in order to be excellent players they must improve static flexibility and then develop much better dynamic flexibility.

Volleyball involves movement of the whole body. Every joint should be flexible. Flexibility of the joints should be improved to the maximum, and muscles and tendons stretched to the greatest extent that is possible.

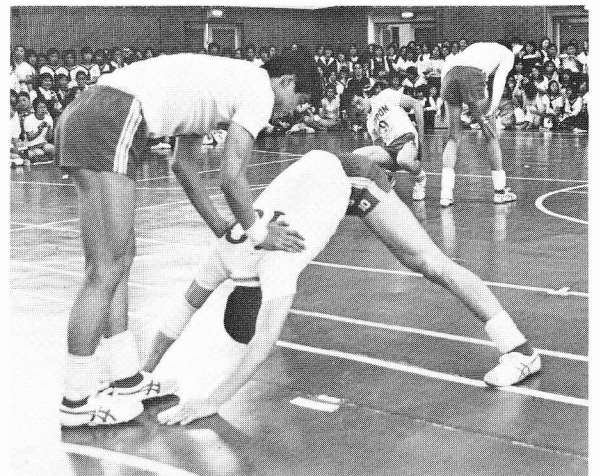


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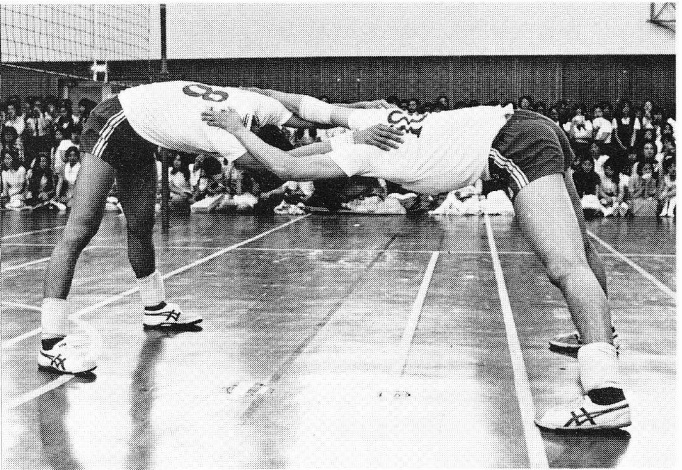




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Training for flexibility must start when the whole body is warmed up and has perspired after warm-up or light exercise. Flexibility training is also very useful in recovering from fatigue, so should be done in warm-up exercises as well as cool down exercises. (Pictures 1 to 9 illustrate training for flexibility).

## **How Should Physical Training be Done?**

I have promoted physical training for volleyball and developed methods to build the physical strength of volleyball players. Now many people realize that I have been successful in my methods. My theory and methods are used by many teams and coaches.

I realize that other sports in Japan have not fully discussed and researched physical training methods. Every sports association says that it needs good organization of physical training, but few have done anything about it yet. I have organized the physical training methods for volleyball and successfully improved the physical strength of the players. I was able to do this with the suggestions and encouragement of Mr. Matsudaira, who organized the major plan for the improvement of the National team. When I look at other sports in Japan, I find none that have a programme aimed at building up physical strength of its players. There are a few sports associations which use a trainer, but his job is only to massage the players or assist the coach. I think therefore, that it is impossible for other sports to improve the physical strength of their players.

## **A Trainer Should be a Specialist of his Sport:**

I am going to describe my view of a trainer. First of all, the trainer should be a specialist in his sport, i.e., he should have experience either as a player or a coach. Many trainers who work in the area of physical training are not specialists in that sport. For example, some professional baseball teams hire trainers who were runners or jumpers in track and field. They are experts in physical training to build muscles for running and jumping but I don't think they can organize the best methods for baseball because the methods of running and jumping in track and field are essentially different from those of baseball. In other words, running in baseball is very different from the 100 metre sprint in track and field. Baseball requires a player to run along a square around the diamond, sometimes running forward and backward as in when they try to steal to the next base. Track and field requires that a runner sprint forward only.

Moreover, trainers from track and field are apt to make players jog in one direction only. If they continue to jog in this direction only in warm up exercises for one year, their muscles on only one side of their legs may be improved, when it is necessary to improve muscles equally on both legs. I think therefore, that a trainer must be a specialist or expert in his sport in order to organize the best method of physical training for his sport. It is not easy to create and organize a good method of

physical training for your sport. We must do our best and be patient to overcome hardships and difficulties.

During the trip to Europe for the 1970 World Championship, I studied training methods in foreign countries and noted the physical strength of the players brought up by these methods. As a result, I had great confidence in my methods of physical training. I had groped in the dark for my new method and had repeated numerous errors. Often I said to myself, "Is my method right?" Mr. Hiroshi Toyada, Chairman of the Research Committee of the JVA, who had been a trainer of the National team had given me advice and encouraged me. At last I had created a training method the volleyball and now not only the National team, but many teams in Japan use my methods.

## **Mutual Understanding Between a Coach and a Trainer:**

In order to improve physical strength of a team it is important to have a mutual understanding between the coach and a trainer. Whether a trainer can do his job successfully or not depends on the coach.

In the case of the National team half of the practice time is usually spent in physical training and at least one-third of the time during the camp. It is quite natural for coaches to want to spend most of the practice time on drills for technique and skills, but Mr. Matsudaira was willing to give me half of the practice time for physical training. Mr. Matsudaira felt that we would be World Champions when we became Number One in techniques and skills and Number One in physical strength.

In foreign countries it is very common to find players who are more than 1.90 metres, but not in Japan. Other countries can easily select taller and more skilled players from many candidates, while we have great difficulty finding many tall players with potential. We can beat foreign teams when our players improve their physical and technical skills more than those teams. Therefore, we must have scientific methods for physical training in volleyball.

This was Mr. Matsudaira's point of view. Since I had the same opinion, I tried hard to cooperate with him, with all my abilities. Our mutual understanding and co-operation resulted in the excellent physical condition of the National players.

There is a question as to the status of a trainer in the sports system. As you know, for example, a trainer cannot participate in the Olympic Games as a formal delegate, but only as an informal participant or observer, sent by each of the sport associations. I don't think that we can be successful in the physical training required by each sport without the establishment of a status for a trainer.

## **A Trainer Should be Trusted by the Players**

A trainer should be a man of character who is trusted by the players. He will be of no value if he is not trusted by the players, even if his methods are good and he shows enthusiasm for his position. He should be a person who is respected by them.

Frankly speaking, I don't think that I am a man of character, but the players appreciated all my efforts and Mr. Matsudaira has trusted and supported me.

Coaching staff and players have to do their best with individual jobs shared by each other. A trainer has to do his best for the development of physical strength. When we try to do the job of a trainer from a broader point of view, such as that of head coach, various elements a trainer requires come out naturally.

## **Every Sport Has It's Own Method of Physical Training:**

Physical training methods for volleyball have been paid much attention both inside and outside of Japan. The All Japan Sports Federation asked Mr. Matsudaira and myself to give a lecture on physical training for volleyball, to all trainers of all the sports attending their clinic. There, trainers of such sports as swimming, track and field, and basketball asked us eagerly to show them how to train their athletes. Even in foreign countries, "The Physical Training for Volleyball" was often in the news and impressed and interested them much more than our matches. Because of their interest I am confident in our methods of building physical strength and physical training.

When I was invited to train other sports, I would refuse the invitation. Though I have been successful as a trainer for volleyball, it doesn't mean that I would be successful as a trainer for other sports. Each sport should have a trainer to develop its own methods and every sport association must make an effort to develop good trainers.



# Tactics of Volleyball

Yasutaka Matsudaira

## Styles of Volleyball in the World:

There are many various styles of men's volleyball in the world. That is, individual nations play volleyball according to their national characteristics. For example, they may be identified as follows:

- "The power" of the Soviets,
- "The height" of the D.D.R.,
- "The individual skill" of Czechoslovakia,
- "The speed and combination" of Japan,

and so on.

There is a reason for the existence of different styles of volleyball. These styles illustrate national characteristics. The "power" of the Soviets is derived from that part of their nature which makes much of power, urging bigger men to push on to the end. The "height" of the D.D.R. is based on the Germanic, who value the statistic "safety". The "individual skill" of the Czechoslovakians has been bred in the same manner as that that produces elaborate machine-guns as well as cut crystal glass, known world-wide. Japan's "speed and combination" consists of quick movement and changeable offense, combined with colourful attack systems. This is derived from the Japanese tradition which values agility and thinks highly of sacrifice and dedication.

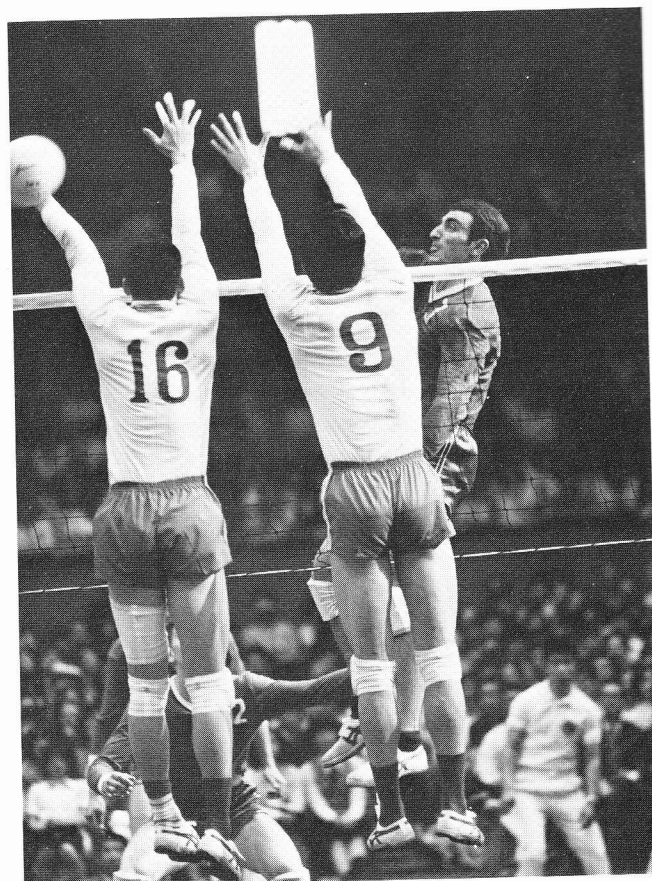
These styles of volleyball may be divided into five areas:

1. Volleyball with "power"
2. Volleyball with "height"
3. Volleyball with "individual skill"
4. Volleyball with "emotion"
5. Volleyball with "combined forces"

### Volleyball with "Power":

A team typifying a team which plays with power, is the Soviet Union. The Soviets like to see bigger men hold smaller and weaker men down with power, while Japanese are very glad to see small and weaker men beat bigger men with swift movement. The Soviets think that "power" is right. That is why they play with power.

At the Mexico Olympics, the Soviet team had a dynamic trio, three superior spikers, Kravchenko, Sybirijkov, and Beryjv. These players were well known to Japanese fans as they had come to Japan often. These three, with more than 100 kilograms weight and 1.95 metres height, spiked furiously and with great power at the matches. Thanks to them, the Soviet Union was able to win Gold medals twice



Chulak spiking against Japan.

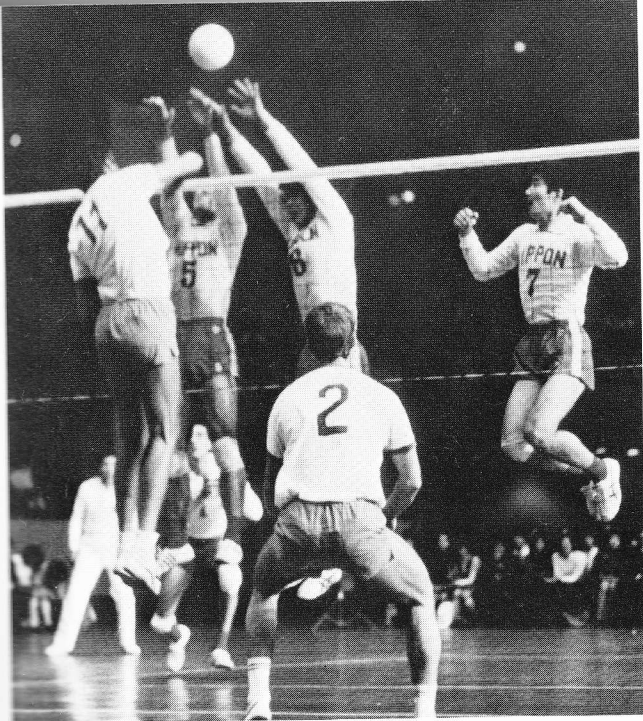
in a row at the Olympics. In addition to power, the Soviet team has exercised speed since the World Championships in 1970. Two members of this trio, Sybirijkov and Beryjv, retired just before the Munich Olympic Games. Their coach, Chesnokov captain of the team at the Tokyo Olympics, thought highly of both "power" and "speed".

The Soviet team still bases its thinking on power. Even medium sized players (1.90 metres or so), such as Churuk, Patkin and Ptjatov, spike powerfully from the highest point to the floor, within the opponents attacking area. They have excellent jumping ability and continue to spike powerfully however often they meet the opposing blockers. Recently, the number of large-sized players has increased in the world and the reach of blockers has been getting higher and higher. Thus, their spikes are often shut out by the opposing blockers, but they never give up spiking with power.

I have often thought that they would be better to spike with more skill instead of power, but they never do. That is their way. The Bulgarian team and the Polish team also rely on power.

### Volleyball with Height:

The statistic "safety" in the play of the D.D.R., is based on errorless play. The D.D.R. team plays with "height", reflecting their characteristic attachment of the importance of errorless play. For example, we are always prepared to run a risk,



Spiking with a high contact by Schneider, captain of the D.D.R.

more or less, when we use a quick combination attack system. Any slight error often causes our defeat. That is to say, we always play at the risk of a high percentage of errors. On the contrary, the D.D.R. team plays in a slow tempo; the ball is bumped higher on the service reception and then the setter sets the ball higher to a spiker, who is very tall, the spiker then spikes at the highest point. They seem to take no risk at all. Their percentage of errors remains very low. They have a lot of tall players with ample jumping power, such as Shertz, Sneider and Schuman.

The D.D.R. team employs tactics with a low degree of error. That is, they play with "safety" which needs height. The D.D.R. team won the world Championships in 1969 and 1970. As the volleyball in the world is becoming quicker, the D.D.R. team has developed more tactics using more speed. They still pay full attention to their plays and tactics to avoid a high percentage of errors. For example, they try to use properly a high setting attack at slow speed and a quick attack, changing every set. Even when they play with "speed" like a Kamakaze Attack, they still maintain their position of low risk.

#### **Volleyball with "Individual Skill":**

Czechoslovakia is located in the middle of Europe. It has been said that the country that governs Bohemia (area of mid Czechoslovakia), governs Europe, thus isolating the Soviet Union.

Every time an international situation grew strained, Czechoslovakia would be driven into trouble. For example, at the international meeting in Munich in 1938, Great Britain and France compromised with the Nazis in Germany in order to isolate the Soviet Union. In 1939 the Nazis invaded an important

military and industrial point in Czechoslovakia, under the commitment with Great Britain and France. Even after World War II, Czechoslovakia was used as a international buffer between Eastern and Western countries.

Later, in 1968, Czechoslovakia was again invaded by the armed forces of Poland and the Soviet Union, in order to prevent their freedom. This history of hardship in Czechoslovakia has taught their people patience. They wait for a chance to strike back with resistance, and with their individual skills they produce elaborate machine-guns and beautiful cut glass. With this skill of the individual they have developed their volleyball.

Remember Schenk, the tallest player at the Tokyo Olympics at 1.98 metres. He is a very skillful player and the technician of the Czechoslovakian team. He tries to spike with just enough power and tries to wipe out or spike at the finger tips of the opposing blockers. Sometimes he does a "rebound play". He is always thinking and trying to get a free ball from his opponents. The opponent spikers become irritated, attacking seriously. Because of his height, he can easily block the opponent's spike and patiently waits for a chance to do so.

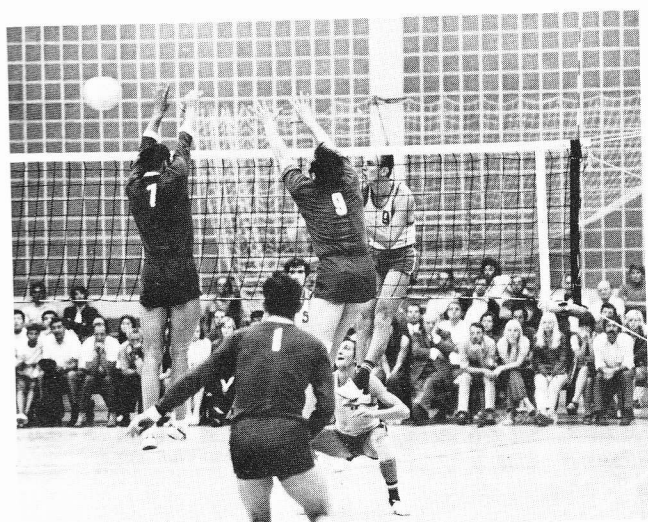
Though the Czechoslovakians belong to the same Slavic race as the Soviets, their thoughts and ways are quite different. They think, "It is nonsense for us to do everything with power, animals do everything with power only. We can use wisdom as well as power." Thus has Czechoslovakia been able to closely compete with the Soviet Union for a long time.

## Volleyball with "Emotion"

This type of volleyball is illustrated by a team which plays "on fire" and shows great emotion. Latin teams illustrate this type of play. Once something excites them during a match, they plan unbelievably well. On the contrary, when they are at the bottom of their spirits, they feel depressed and are unable to display their real power.

In the World Cup of 1969, we were unexpectedly beaten by the Brazilians in the preliminary round. We had been sure that Brazil was much weaker than we were. We made many mistakes in the first game, so they were elated by our errors and played with great emotion far beyond their real power.

Because of our unexpected defeat at the hands of Brazil, we were compelled to remain in second place, though we had beaten all the Eastern European teams such as D.D.R., the Soviet Union, Czechoslovakia and Bulgaria in the play-offs, while Brazil lost all its matches in the play-off. This result illustrated their real power.

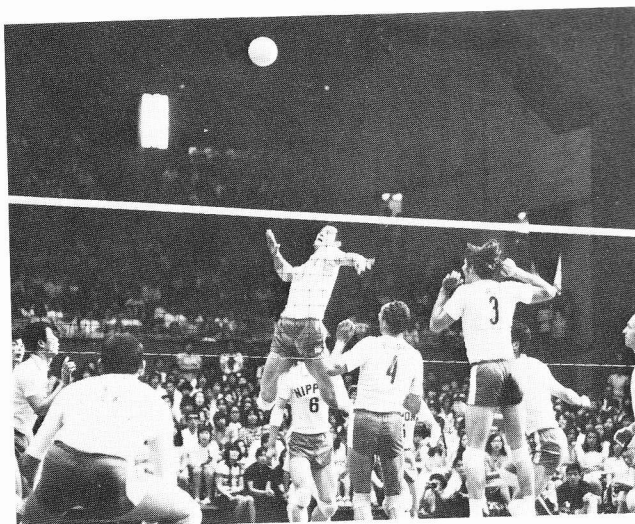


Romania — opposite court.

No one can deny that we were much superior to the Brazilians at that time, but they beat us. This fact shows that the teams which play with "emotion" can sometimes display explosive power beyond their real power when they are excited by something. We must be very cautious when we play the Latin team which play with "emotion".

## Volleyball with "Combined Forces":

Mr. Kainu Mikkola Chairman of the Development Committee of the Finish Volleyball Association calls the Japan Men's volleyball team a "combined force". Each of the Japanese players has a very speedy movement, a sense of co-operation and self-sacrifice. The players are like elaborate gears of a machine. They are all combined and harmonized



Japan.

into an excellent frame of teamwork. The Japanese Men's team exemplifies 'combined forces' he says.

He strongly believes in the Japanese Men's team. For example, there is a "Zikansa" attack done mainly by Morita and Kimura, as a weapon of quick combination attacks with very speedy movements. First Morita or Kimura jumps to make an "A" quick attack and a little later, Oko or Yokota jump to spike a higher set from an "A" quick attack, Oko or Yokota can easily spike effectively. Whether a set should be done for an "A" quick attack or for a later attack, depends on a setter's decisiveness. Setters should be smart and calm. Morita or Kimura who jump to spike a set for an "A" quick, actually spike two or three times out of ten jumps. The other seven or eight jumps are just a trick. In other words, Morita or Kimura must jump ten times to spike only two or three times. They must jump to help others spike easily or successfully. Others can be successful only if the sacrificial plays are done by Morita and Kimura. When you see such a system of attack by the Japan Men's team, you can understand that the type of Japanese volleyball is based on our national characteristics.

## Volleyball Spread Eastward and Westward

Volleyball was created in the United States of America in 1895. It is said that it came from the 'volley' in tennis. Volleyball came across the Pacific ocean to Kobe, Japan, in 1913, with Mr. Brown. In Japan volleyball was first played with 16 players, next with 12 players, and then with 9 players. The 9 man system volleyball settled in western Asia with "The Oriental Rules". While volleyball crossed eastward over the Atlantic Ocean and spread throughout Europe and made great strides as the 6 man system. The process of the development, though I am not sure, was first made in the Soviet



Union in 1920. I have heard that before World War I Stalin was absorbed in volleyball and played enthusiastically in the Kremlin Palace.

As soon as the group of Communist nations was established in Eastern Europe after World War II, volleyball rushed into these countries and spread out. Volleyball is an inexpensive game. You can play with one ball only. If you don't have a net, you can use a rope instead. A shortage of materials during and after the war helped the development of volleyball. That is why many people enjoy volleyball in the Communist nations.

### The Spread of Volleyball Westward:

The same thing happened in Japan. Many people preferred volleyball because they could enjoy it easily and cheaply while they lived in a state of confusion and lack of materials just after World War II. The defeat of the war gave us a great motivation to promote volleyball rapidly. It was not long after the war that we had the first boom of volleyball. The techniques and skills were naturally improved in the boom. 'A' quick attacks, tip attack methods, diving defense and a drive-serve, etc., were created and developed rapidly.

Major tactics and techniques which we use now were derived from those tactics of the 9 man system of volleyball of those days. For example, the main weapon of our National men's team, a quick combination attack, diving defense and a drive serve by Morita, came from this. The 9 man system volleyball was very popular in Japan, but it was not popular internationally. During the big boom or the 9 man system volleyball, the 6 man was brought by the Armed Forces of the USA in Japan. We had much interest in the international 6 man volleyball. We began to pay attention to the volleyball of the world.

The University of Waseda visited the United States to learn volleyball in 1953. Both the 6 man and the 9 man system volleyball were adopted in the Asian Games in 1956. As the movement to bring the Olympic Games to Tokyo became active, we started to ask the I.O.C. to adopt volleyball formally in the Olympic Games. The time to import the 6 man system volleyball into Japan was ripe.

### The Volleyball of the East and West Shake Hands

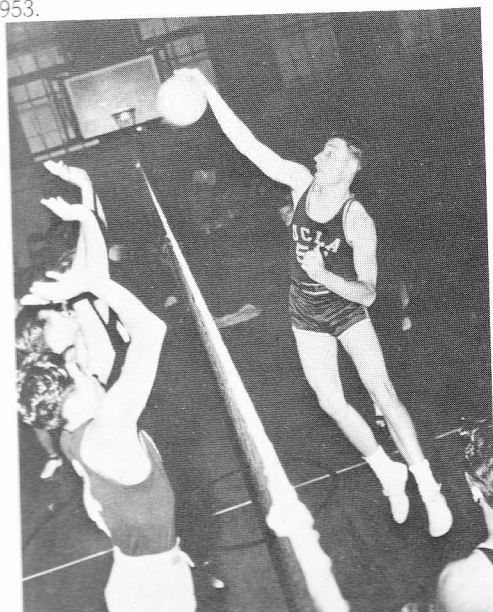
After the confusion of World War II the international exchanges of volleyball were becoming popular between European countries centering around the communist nations. The first World Championship was held in 1949, and later the participants were gradually increasing. In such circumstances of the world, Japan started to join the volleyball in the world. First of all, we sent the men's and women's teams to the World Sports of Youth Competition held in Moscow in 1957.

In 1960, just after the adoption of volleyball for the Olympic Games in Tokyo in 1964 was decided, we attended the World Championships in Brazil for the first time. In this year the first international competition between Japan and Soviet Union was held. At last the volleyball that had spread westward and volleyball that had crossed eastward shook hands with each other.

Our record of the international competitions since 1960 follows:

- 1964 3rd place in Tokyo Olympic Games
- 1965 4th place in World Cup — Poland
- 1966 5th place in World Championship — Czechoslovakia
- 1968 2nd place in Mexico Olympic Games
- 1969 2nd place in World Cup — East Germany
- 1970 3rd place in World Championships — Bulgaria

Waseda University team in the United States National Tournament, 1953.



Japan vs Poland, 1962. Poland was visiting Japan for the first time.



We have steadily promoted our level and are now one of the top level teams in the world. Incidentally, Japan and East Germany started to play the 6 man system of volleyball at approximately the same time. Japan was ranked the top team of the world as a result of the Gold medal for the Japanese women's team and the Bronze medal for the men's team in the Tokyo Olympic Games in 1964. East Germany was ranked in the top level only after the Mexico Olympic Games. What was responsible for the difference of several year's development between the two countries? We had a long history of the 9 man system volleyball when the 6 man system came to Japan.

The 9 man system has 9 players on the court with 11 metres square, the 6 man system has 6 players on the court with a 9 metre square. The 9 man system consists of specialists without rotation. At that time the 9 man system had many differences from the 6 man system, but it had highly improved techniques and skills for volleyball. The high level of these techniques and skills has been passed on to the Japan men's National team of today.

### International Exchanges of Techniques and Skills

The volleyball of the East "shook hands" with that of the West. The international competitions were becoming prosperous and international exchanges of techniques and skills were active.

There were various types of volleyball reflecting the individual national characteristics in the Communist countries centering around the Soviet Union. At the beginning, their way was only to spike high sets on both sides. As the Czechoslovakian team began to use short and low sets, other countries imitated their way and imported their techniques. Even in the Soviet Union, they had the very basic quick attack with the combination of Monzorefski and Voskovsinikov around 1960. It was after the Tokyo Olympic Games that the international exchanges of techniques and skills became more active.

In those days we were much shorter than the players of Europe. In order to compensate for our short height, we adopted quick combination attacks which were familiar to us as tactics of the 9 man system volleyball, but not familiar to the European countries. They cried in the gymnasium at the "fantastic" sight of the quick attacks done by the Japanese men's team. Consequently, the Japanese methods of quick attacks started to invade the European countries. Their methods had been previously to spike a high set powerfully. On the other hand, we tried hard to construct a National team as tall as the European teams, and tried to learn the European methods. We

recognized that it would be impossible for us to win the Gold medal in the Olympic Games using only quick attacks. The quick attack tactic was only a means to getting the service as a result of a side-out. To get more points we needed powerful, tall players who could spike high sets from players other than setters.

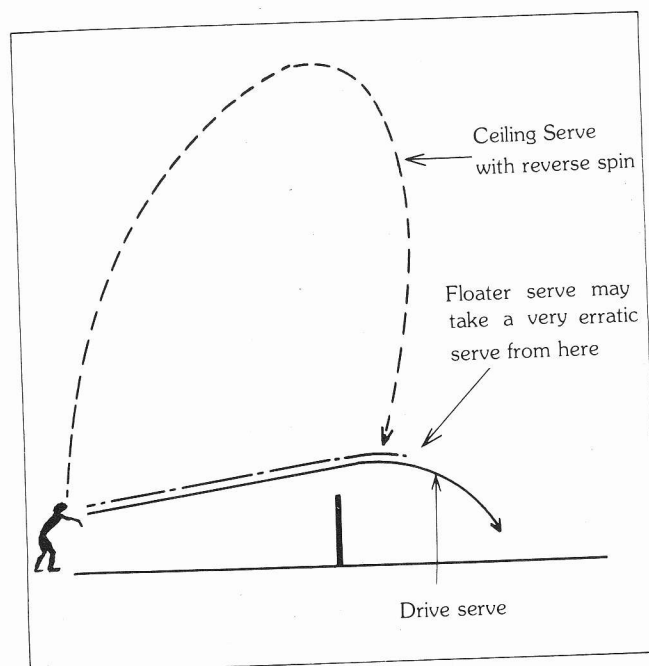
These sets off the net are often from difficult angles when we tried to make a counter-attack from a defense system. Moreover, the new rules revised in 1965 gave us much more of a disadvantage than before, because the passing of hands over the net after a spike was permitted.

We were obliged to construct the team with large-sized players like the other countries, after the Tokyo Olympic Games, as a result of our 3rd place finish using quick combination attacks with shorter players.

I have successfully built the national team with large players and created and organized the unique tactics for it, since being appointed the National coach.

### Serving

Games start with a serve. That is, the service is the act of putting the ball into play. It is not right to recognize the service only for commencement of the play. The 6 man volleyball system has a side-out system, but in the 9 man game you can score every time, as in table tennis. According to the rules, a point is awarded to the serving side only. The fault made by the serving side is only penalized by loss of service, but not loss of point. Therefore, the serve is



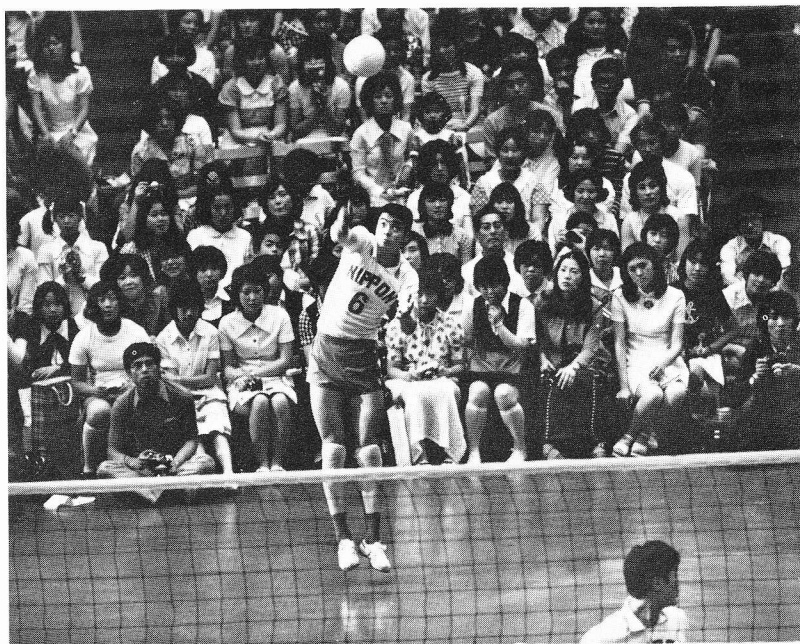
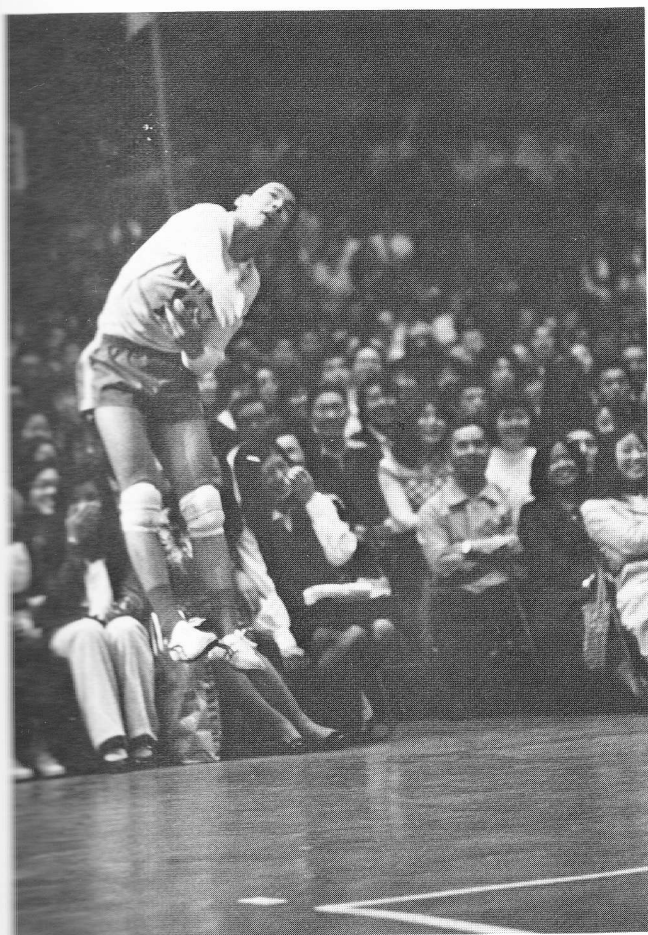
the easiest way to get points. In other words, the serve is the most important element to win. To speak to the extreme, it is possible to get 15 points in a row with only a server, without any other play.

The serve has been researched and drilled harder than ever in all countries. As a result, the Soviet and Czechoslovakian team have had the most effective serves with speed. In Japan it was our most important target to improve our serve just before the Munich Olympic Games. We spent so much time on drilling it that the serve of Morita, Yokota, Oko, Kimura and Shimaoka etc., became more speedy and varied (in a positive sense).

The serve is divided into three types according to its quality.

1. Floater serve
2. Drive serve
3. Ceiling serve with a reverse spin. (sky ball)

Serving with jump, by Shimaoka.



Japanese float serve, by Fukao.

### Floater Serve:

We have two kinds of floater serves. One is the Japanese floater serve, originally created in Japan and the other is the tennis floater serve which is used by more than 90 per cent of the players of foreign countries. Both have no spin and move in an erratic path as the ball approaches the receiver, though there is a difference between the methods of serving. In order to achieve no spin, the ball is hit with only a momentary point of contact. This quick contact just below the centre of the ball causes it to travel with a "wobble" type of motion; rising, dropping or moving from side to side. This is similar to the knuckle ball in baseball. This applies especially to the serve with the biggest "wobble" as it starts to slow down because of air resistance. It is said that a "wobble" is caused by a sudden resistance of the ball distorted by being hit, a difference in air pressure between inside and outside of the ball, and an air current. As the floater serve shows the biggest wobble when it starts to slow down, it is very difficult for the opponent to receive it, as the biggest wobble always happens in the opponent's court. The placement of the serve depends on the server's adjustment of a momentary contact with the ball. For example, the server can place the ball onto the end line or drop it suddenly within the attack area of the opponent's court.

Kimura can place his serve in three directions; the serve with speed, on the line; with a big "wobble" to the corner just behind the right back player; and dropping suddenly within the attack area cross





Tennis float serve by Chulak, U.S.S.R.

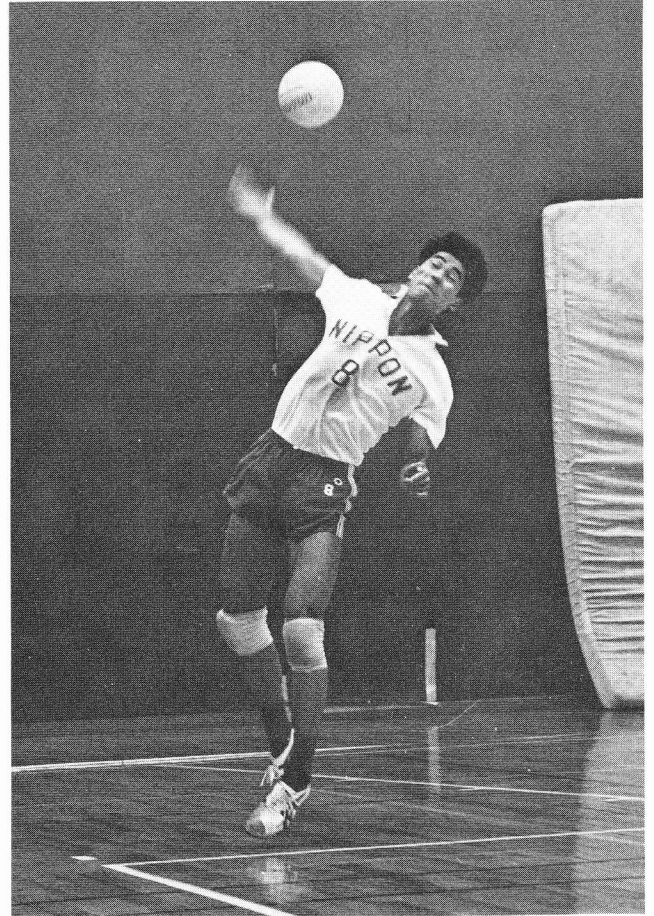
court. The smart placement of his serve makes the receiver nervous. Kimura adjusts his power in the right arm at the moment he makes contact with the ball.

### **Drive Serve:**

The excellent speed serve of Morita is based on the traditional overhand serve of the 9 man system volleyball, developed in Japan. The drive serve results in a fast dropping action with spin caused by action of the wrist. The serve is struck with great force and wrist action, making the ball spin. It is a very fast serve which drops rapidly. If you cannot make the ball spin, the ball travels far beyond the end line. The drive serve with spin starts to drop rapidly after it passes over the net. It is very similar to a "drop" in baseball.

Today, the drive serve is not popular because of the increased chance of serving error. Moreover, it is so easy for receivers to predict the flight of the ball because of its spinning action, so that they usually have little trouble in receiving the serve. It is very effective however as a fast driving serve gives the opposition less time to react if the ball flies between players. Therefore Morita serves straight down the court with a swift thrusting movement of the ball and cross court with a swerving ball to the left. Two kinds of his serves are so effective that we can easily get points during the games.

There are very few players at the top level who use the drive serve except Morita and Nakamura of Japan, Putiyakov of the Soviet Union and Schenk of Czechoslovakia.



Powerful drive serve by Morita.

### **Ceiling Serve With A Reverse Spin:**

The ceiling serve is struck with a momentary point of contact with the arm action slicing upward to give the ball a reverse spin. The ball flies to the ceiling with a reverse spin. It orbits over the court just like the letter "I". This is very similar to a fly ball to the catcher in baseball. After the ball starts to fall down over the opponent's court, it swerves toward the net. Therefore, it is very difficult for the receiver to pass accurately.

The ceiling serve was created in Czechoslovakia. Musil and Gallian, who were setters until the Mexico Olympic Games, often served in this way.

In Japan, Nekoda sometimes uses this serve. When we play volleyball outside, the ceiling serve is most effective. The higher it flies, the more difficult it is to pass. The wind makes it swerve toward the net. As most competitions today are held in the gym, we cannot use the ceiling serve except in a gym with a very high ceiling.

\* Editor's Note:

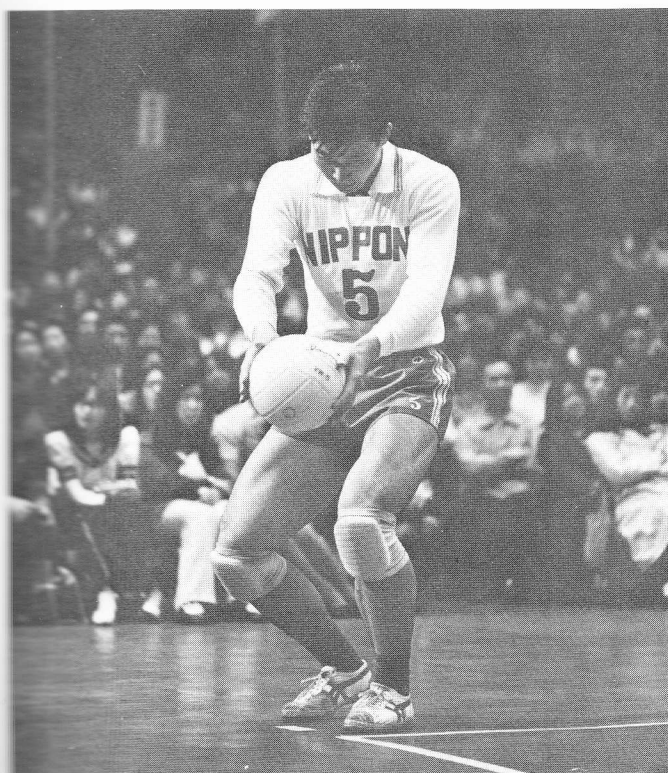
Czechoslovakia used this serve in the Mexico Olympic Games against Japan.

### Placement of the Serve:

The serve is the best weapon to get points. Even if the server cannot make a service ace, we can easily predict the opponents' spiker or the opponents' tactics, or we can get a free ball when the server serves with enough power to drive the receiver into a difficult situation. It is said that to win or to lose depends on the serve. Therefore the top level players of the world try hard to improve their serving with more accuracy, speed, power and float. It is said that the medals of the Munich Olympic Games will depend upon the serve.

The serve only travels a short distance usually no more than 12 metres. Therefore you cannot adjust the momentary contact with the ball for accuracy and at the same time you must limit your power for effective serving. It is also very important to serve at the opponent's weak points. That is, the placement of the serve should be done to the weak points of the opponents.

Ready position for serving, Kimura.

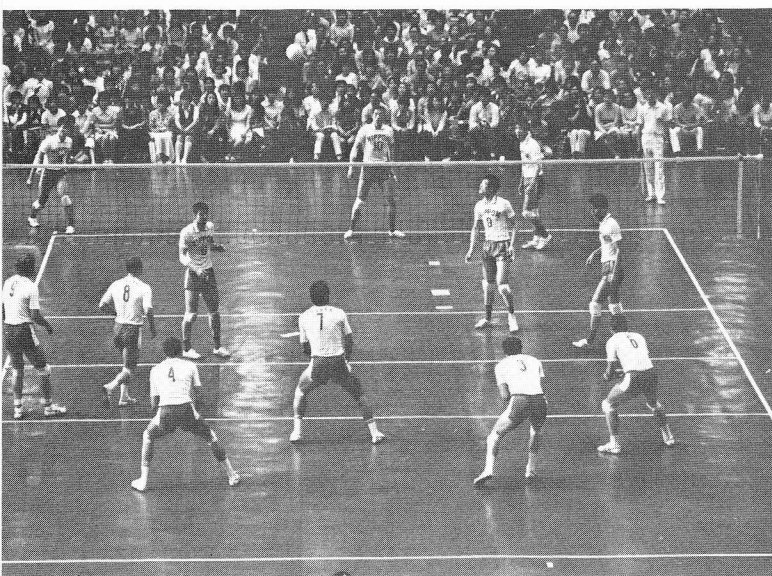


### Targets of the Server:

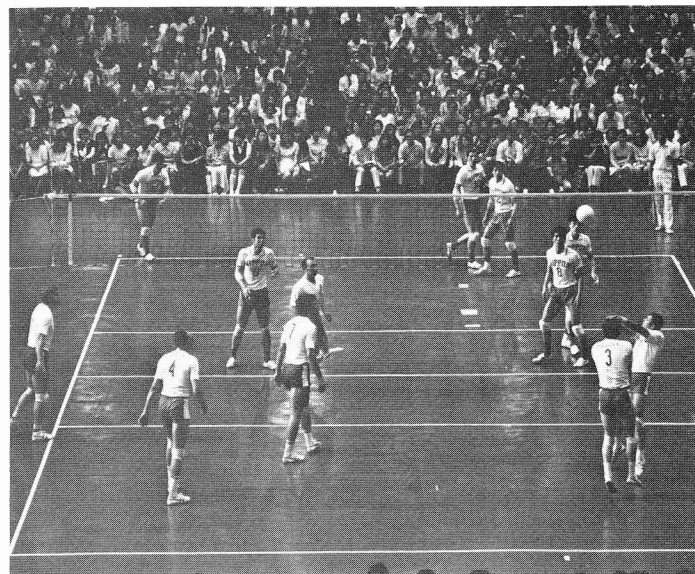
The serve should be placed in the direction as follows. These should be the targets of the server:

1. To the players who are very weak on defense.
  2. Into the path of the setter coming up to the net.
  3. To the main attackers (ace hitters).
  4. To the quick attackers.
  5. To the substitutes.
  6. To the opposite direction the opposing setter has anticipated.
1. It is very common to aim at the poorer receiver.
  2. It is very effective to aim at the setter who is on his way to the net from the back row. If the setter receives the serve, he cannot make the set which is his main job. Even if he doesn't receive the serve, it drops on the floor where nobody is located, because it is quite usual to have nobody behind the setter. At that time, if someone tries to receive it, he may not be successful in receiving it because he cannot take a ready position quickly enough. Two players on either side of the setter are apt to misunderstand that the setter may get it. Both players hesitate and the ball drops to the floor between them.
  3. The main spikers are often served to in order to gradually exhaust them mentally and physically, so that they lose their concentration for spiking.
  4. When the quick spikers receive the serve, they cannot approach to make a quick attack. Even if they can do so, they cannot get good timing for a quick attack.
  5. It is very good to aim at the substitutes who have just come into the game, because they are a little nervous and tight.
  6. The server should be smart enough to predict the opposing setters' intention. The server aims at a place that is very hard for the setter to set to the main spikers, or to make the best attack. For example, when the opponent's ace spiker is on the left front, the server aims cross court to the opponents' right side, with the following result. The ball must be sent to the setter from the right side player. The setter may be forced to use a back set to the ace spiker. He may not be very good at back sets, so he may make a mistake in setting or make such a bad back set that the ace spiker cannot spike with power.

Kimura always predicts the opponent's intention or tactic when he serves to the opponent's right side within the attack line.



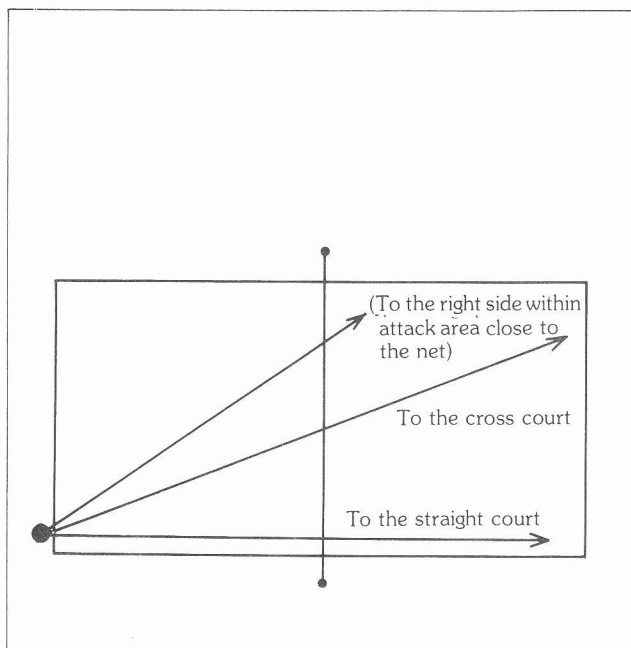
1



Cross court serve by Kimura. (66A) Targets of the serve.

2

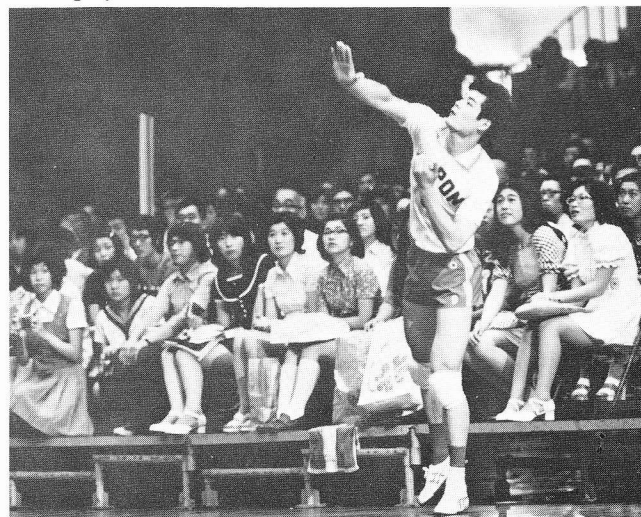
### Targets of the Server



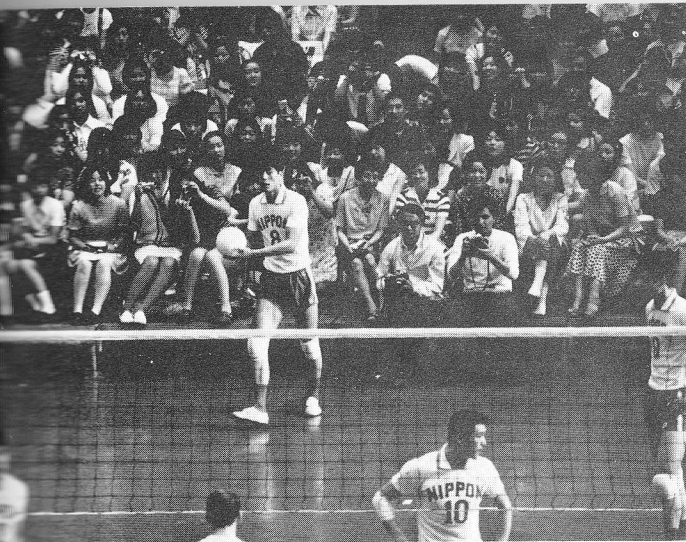
### A Variety of Serves of the Japanese National Team

Kimura can place his serve to the right side within the attack area, cross court and straight down the line, changing his standing position within the service area. Shimaoka first serves deeply to the end line. Next he aims at the right side within the attack area when the opponent receivers stay back a little bit. Thus, the players always serve, thinking what kind of serve is best in each situation. However, this is only the individual tactic for serving. It is more effective when we have a systematic strategy for the team for serving. This will confuse the opponents.

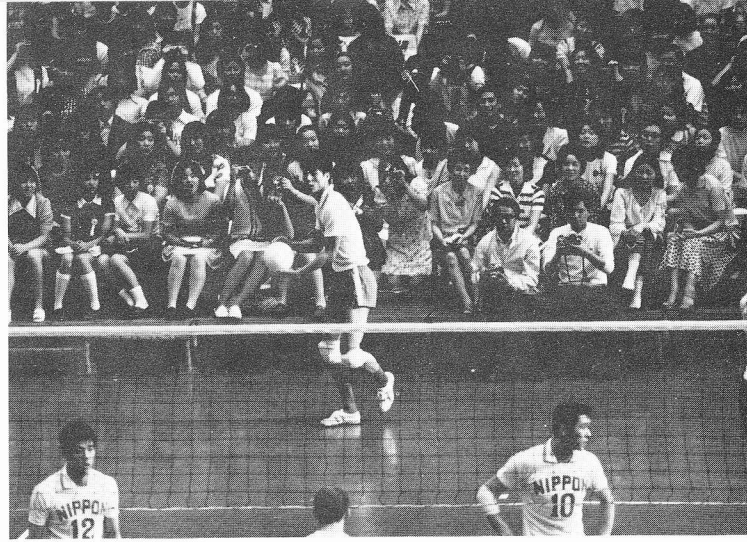
Serving by Yokota.



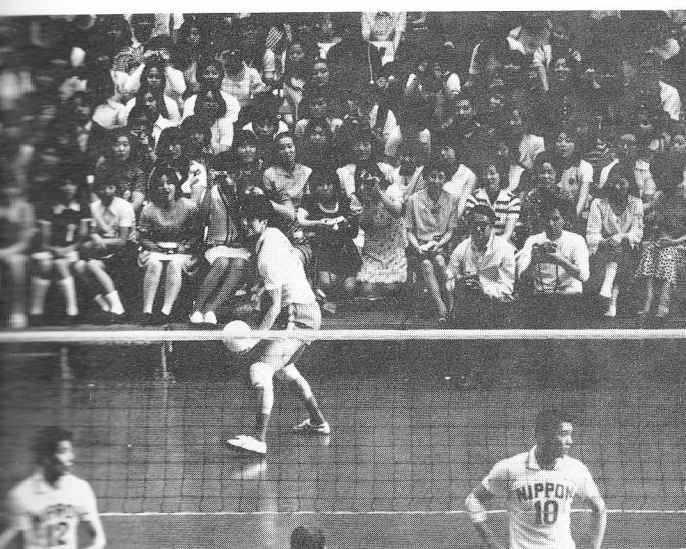




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The systematic team strategy of the Japanese men's team consists of a variety of methods and qualities for serving. We have the advantage over foreign teams on this point. Most of the foreign players serve with the tennis floater. They toss the ball in the air in front of their shoulder and hit it with an arm action similar to spiking. There is a difference between the speed and the change of the serve, but no difference in the contact point and timing. Therefore the receiver can easily get the timing to receive the serve.

In Japan, even on the drive serve, we have two types which differ in timing. Morita strikes the drive serve after he approaches 2 of 3 steps, but Nakamura uses no approach steps. The timing of Morita's serve also differs from that of Nakamura.

The Japanese floater serve is done by Kimura, Mitsumari, Yokota, Oko, Shimaoka, Fukao, Naguchi and Nishimoto. Oko serves with a full overhand swing. Kimura, Yokota and Shimaoko

have very little follow through (something like pushing away), and Mitsumori used a three quarter swing to the side. Each has a different way of contacting the ball.

Minami, Nekota and Saito serve with the tennis floater. Minami and Saito full overhand swing and Nekota with a small follow through after "pushing the ball away". In this way the players with individual types of serves use a variety of qualities and change their standing position with every serve. In this way our serving order produces a greater variety of serves as compared to foreign teams.



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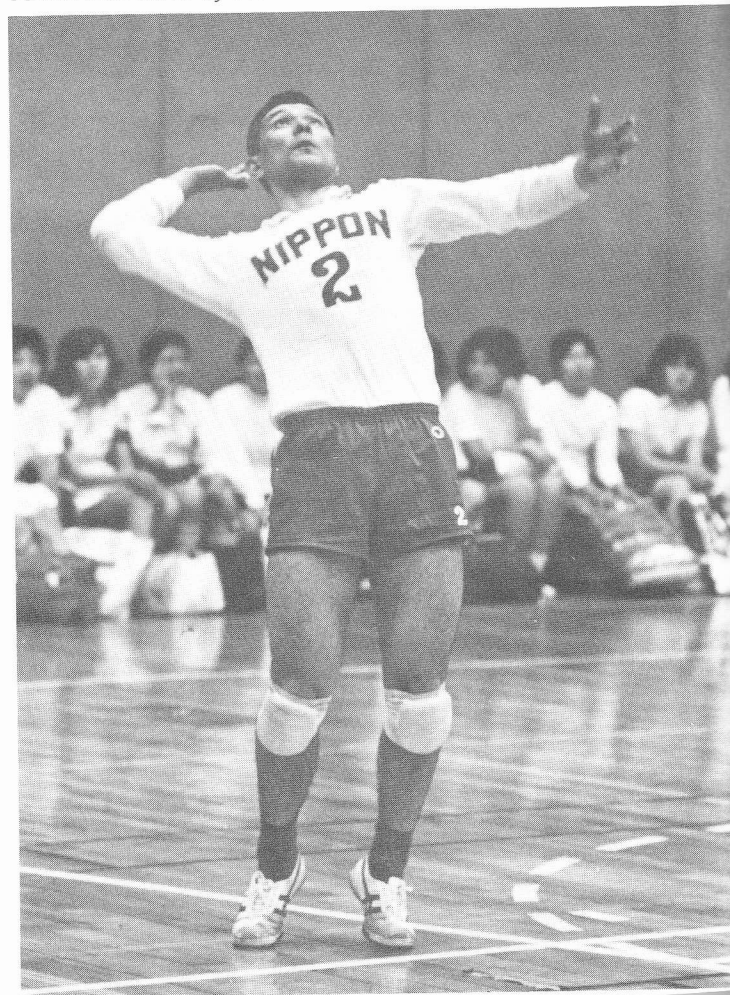


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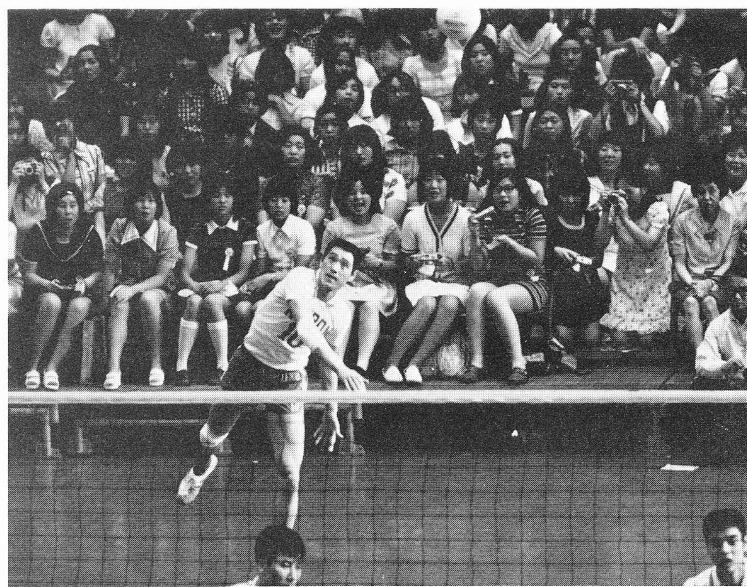
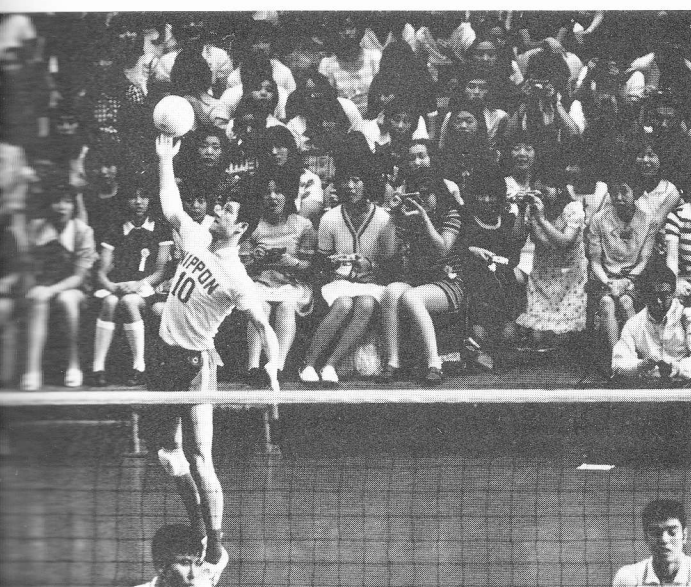
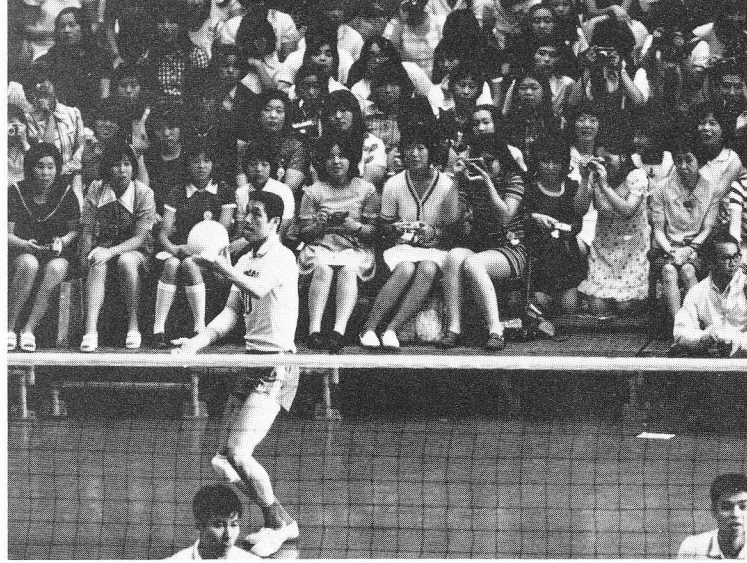
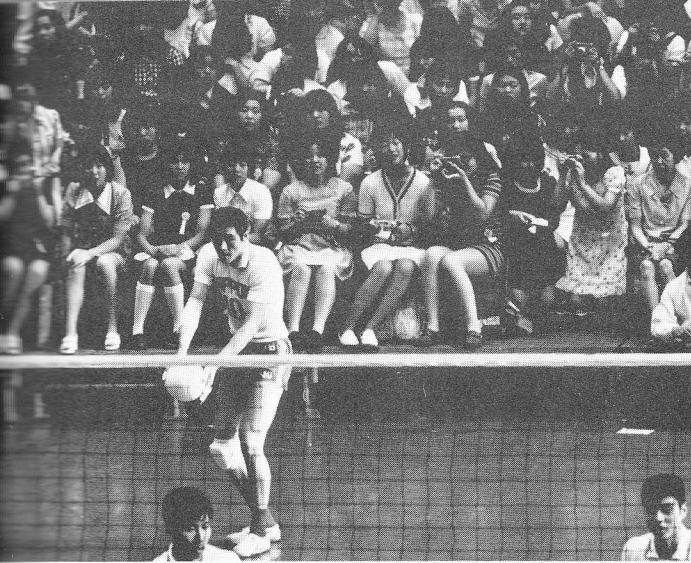
Drive serve by Morita.

- 1) Approaching with the ball, one or two steps forward.
- 2) Trying to toss the ball up after seeing the opponent's system of service reception.
- 3) Lowering his centre of gravity.
- 4) tossing the ball up.
- 5) Swinging arm backward, looking carefully at the ball.
- 6) Hitting the ball, all his weight goes into the ball, wrist is snapped.

Tennis float serve by Nekoda



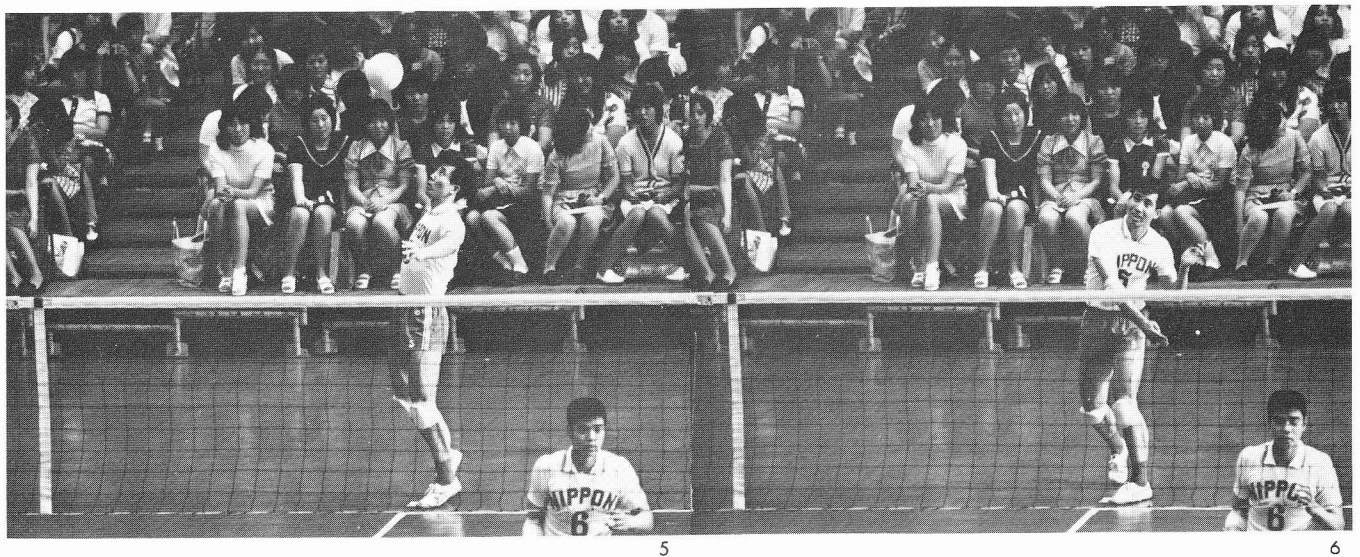
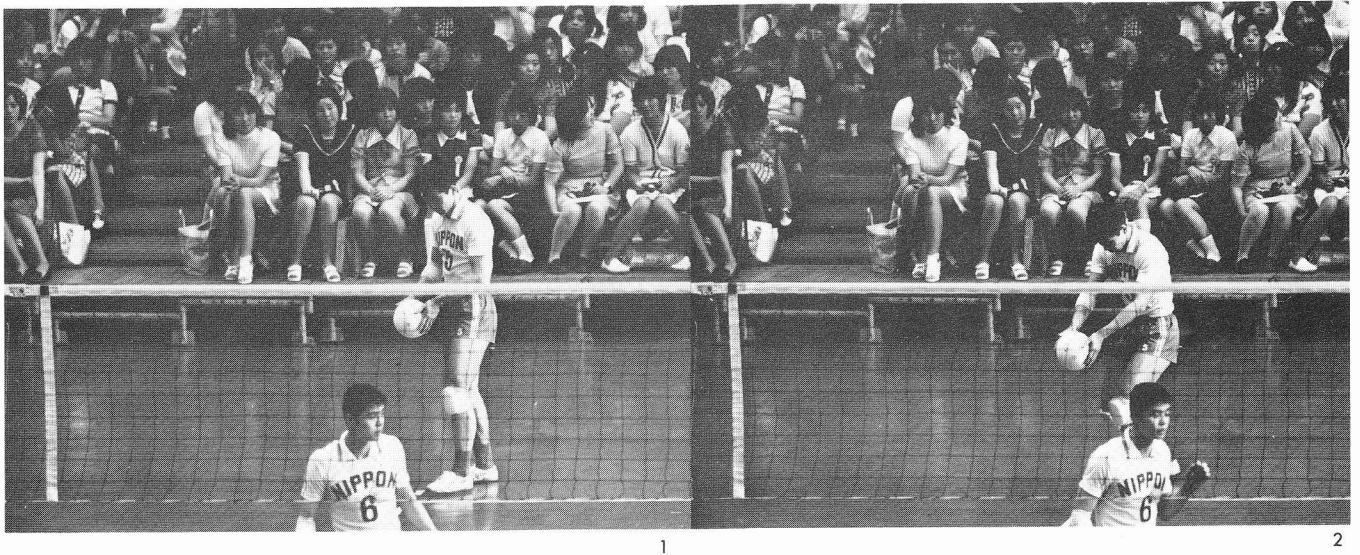




Japanese float serve by Oko.

- 1) Ready position
- 2) See the ball as you toss it up
- 3) Hit the centre of the ball with the wrist bent backward
- 4) Watch the ball after hitting it.





Japanese float serve by Kimura.

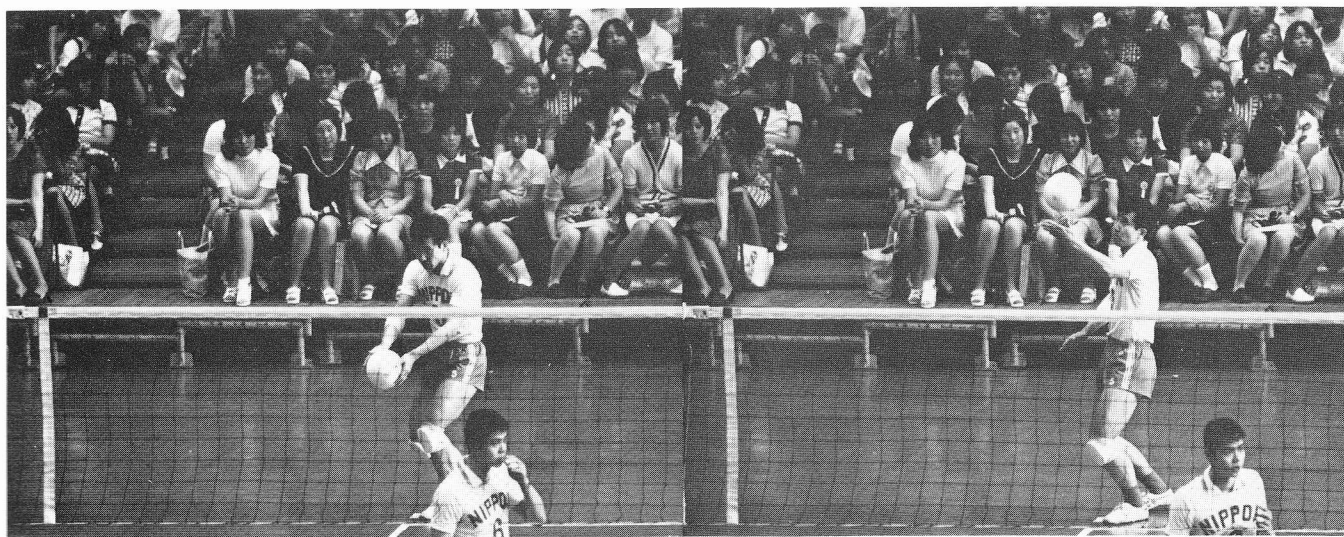
1 & 2) Ready position

3) Deciding what course he should place the ball on

4) Tossing the ball up, looking carefully at the ball

5) Swing the arm, looking at the ball

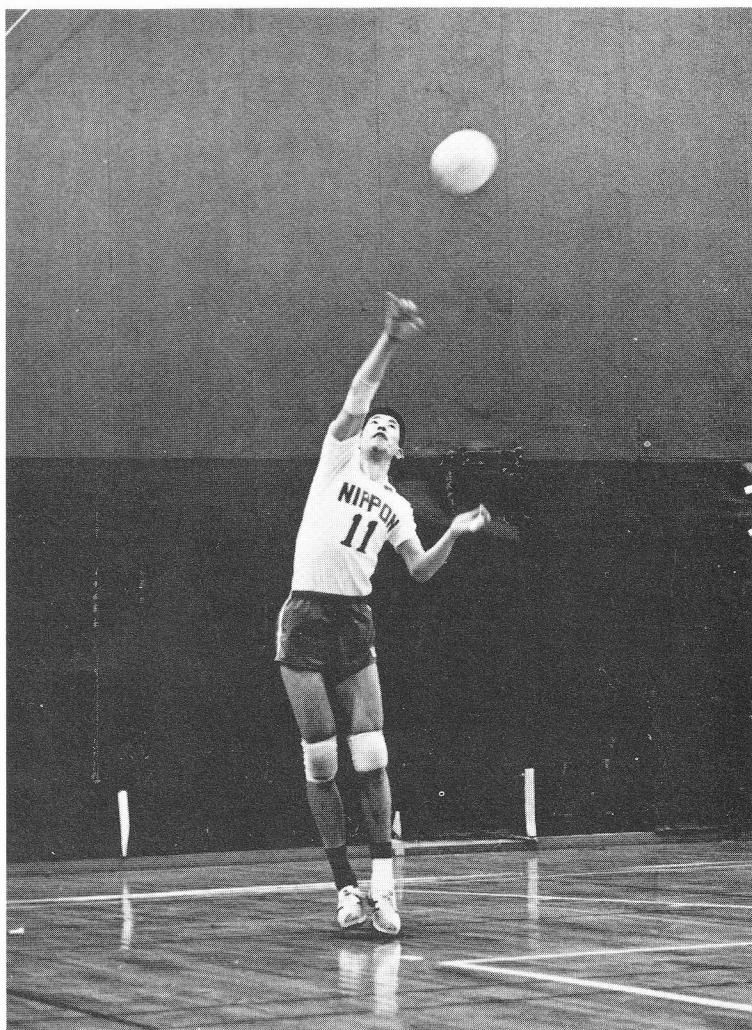
6) Follow through



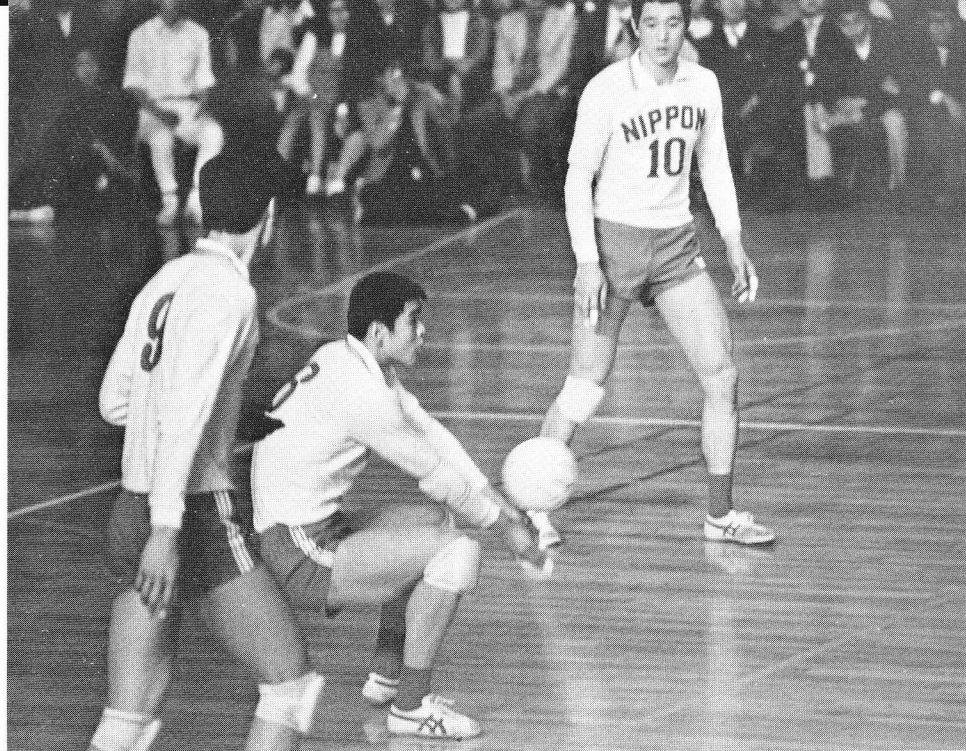
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Tennis float serve by Saito.







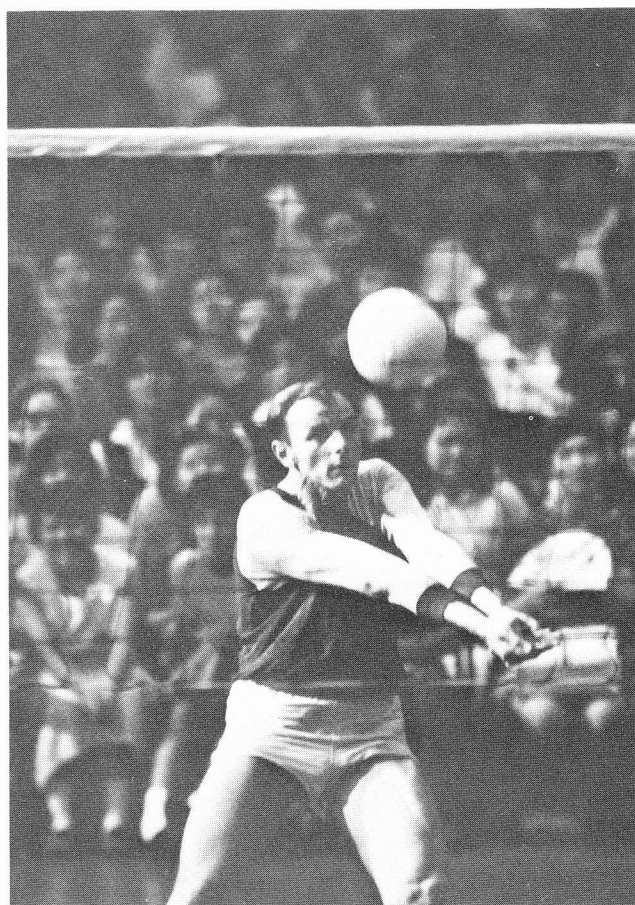
Service reception by Fukao.

### Service Reception

Service reception is very important. It is said, "To win or lose depends on the serve". In other words, the flow of the match is influenced very much by the service reception. Successful service reception leads the team to victory. Successful attacks are largely based on successful service reception.

The serve is usually received with the forearm pass. The overhand pass is not recommended for service reception on a serve that has both float and power because players who use this method are frequently called for illegal hits. The forearm pass is harder to control the ball with than the overhand pass. Therefore it is very important for players to master control of the ball with the forearm pass.

Service reception by Freibardt, D.D.R.



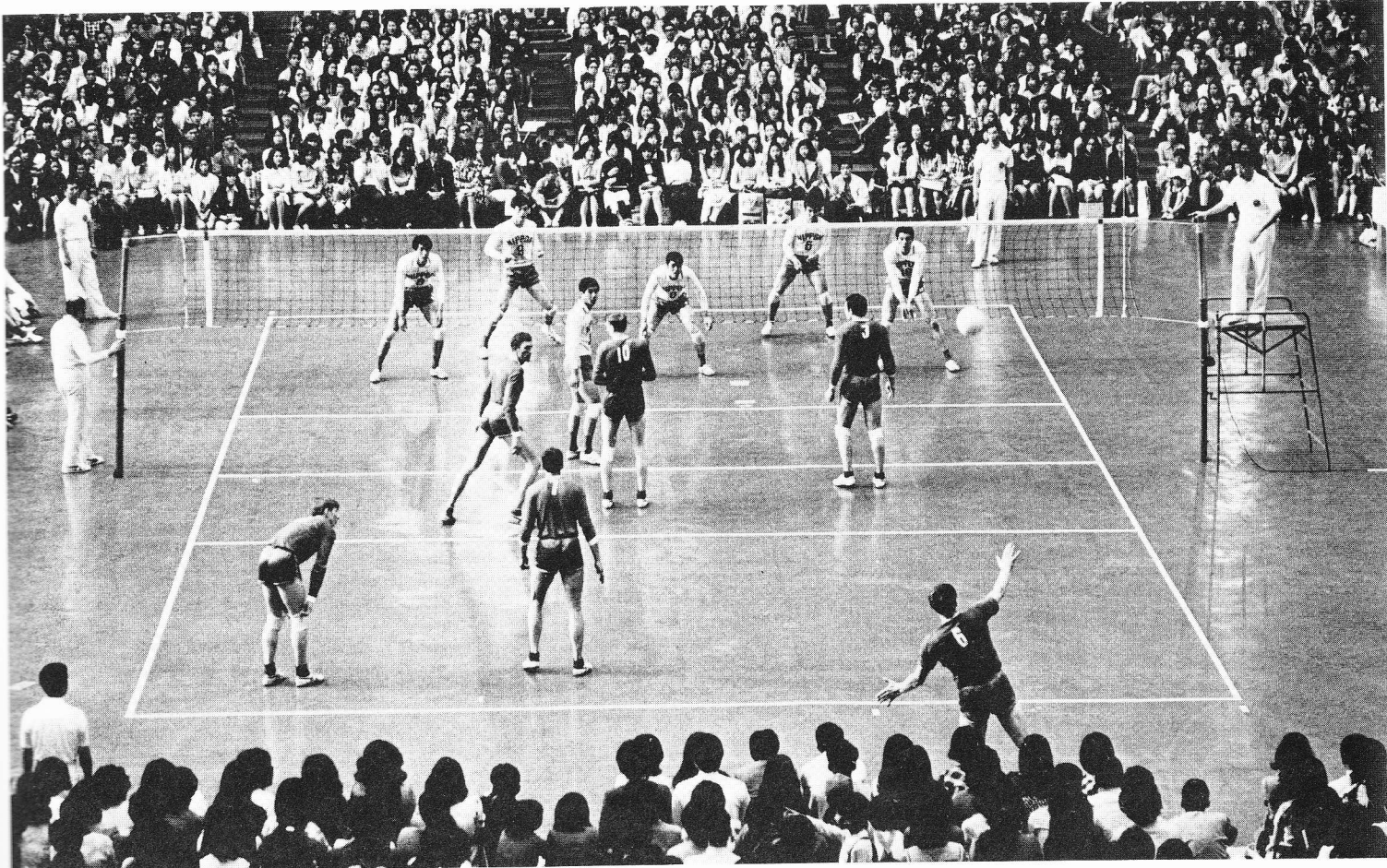


### Systems for the Service Reception:

Two systems are very common for service reception. These are a 5 - 1 system and a 6 - 0 system. A 5 - 1 system is used when one player is placed by the net and the others take a ready position for the service reception. This system is often used when the main setter is in the front row. It is very easy for the receivers to send the ball to the setter by the net because he is their target. When the setter is in the back row, we can put the main spiker by the the net in place of the setter so that the main spiker will not become too tired. We can also put the quick spiker by the net to take a ready position for a quick attack, instead of participating in the service reception.

The 6 - 0 system is used when no one is by the net and all players are far from the net. As soon as the serve is hit, the setter comes to the net. The other five players are actually used for service reception. Basically, we use a 5 - 1 system when the setter is in the front row and a 6 - 0 system when he stays in the back row.

1-5 service reception system of Japan, with Shimaoka as setter.





0-6 service reception system of Poland with No. 8, Gositinjak as setter.



0-6 service reception system with Shimaoka setter (left).







Japan is trying to make a combination attack from the service reception. Shimaoka is the setter.

### **Why is the Service Reception Important:**

Suppose that the ball is not sent to the setter successfully because of a bad reception. We cannot use the quick combination attacks which are done by the net where the setter is. If the setter narrowly sets to the outside spiker running forward or backward, the opposing blockers don't need to pay any attention to the quick attacks. They can take a ready position to block against the outside spiker only. The spiker is compelled to spike under the worst conditions. The worst situation occurs when the setter cannot set, no matter how quickly he moves. At that time, someone who stays back sets to the outside spiker, but he cannot hit the ball efficiently with power.

What happens when the ball is sent too high to the setter who has just come up to the net from the back row? The ball may be struck by the opposing spiker if it flies over the net. A fault may be called if the setter tries to set it. It is likely impossible to set by jumping. The spiker cannot spike because he is in the back row. Finally, the opposing team gets a free ball and creates an effective attack.

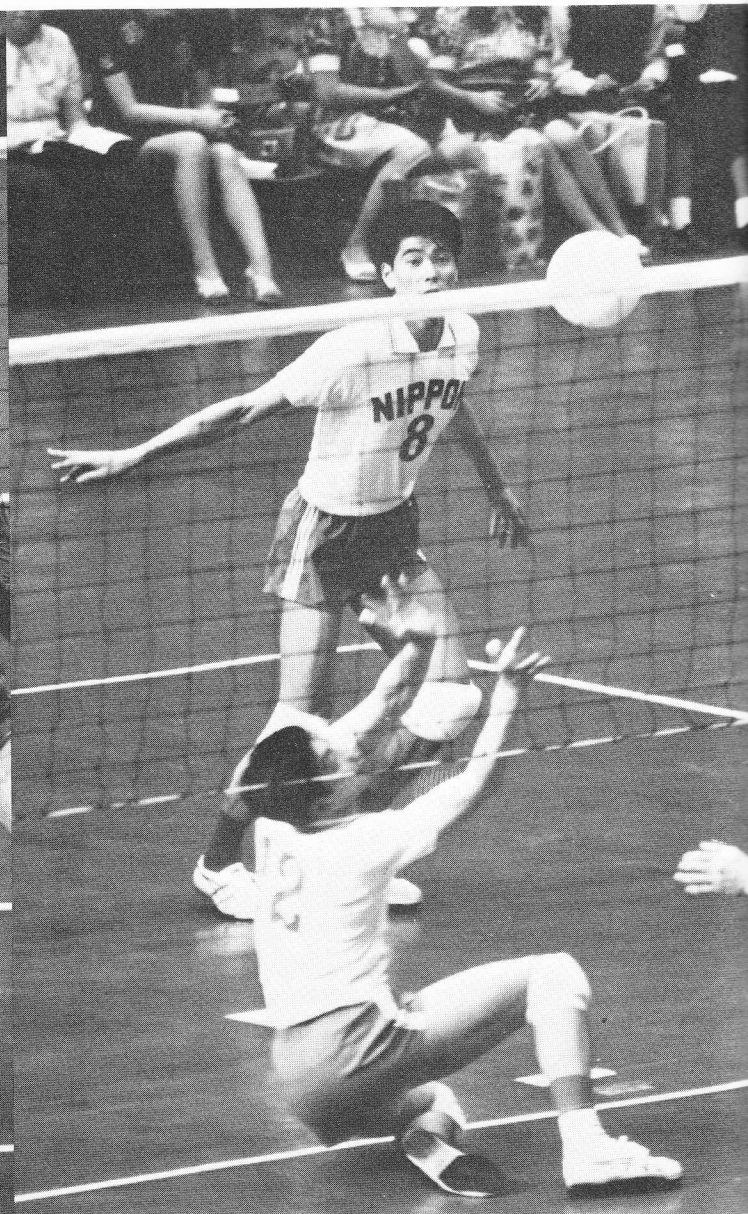
We take a one setter system, centering around Nekoda or Shimaoka and we are good at quick combination attacks. If we are not successful at service reception, we cannot display our real power, the most excellent quick combination

attack in the world. Yokota and Oko, who are among the top spikers in the world can spike effectively with power when the quick spiker in the middle creates a deception for the opposing blockers, but not when no deception is created. Therefore, we attach importance to the service reception as well as to the serve. Naturally not only Japan, but all the foreign countries consider the know the importance of the service reception and practice it constantly, as every country has begun to master the speedy movements and quick combination attack system. In order to win the Gold medal in the Olympic Games we must greatly improve our service reception in order to stand out from the other top teams in the world.





Shimaoka, trying a jump set.



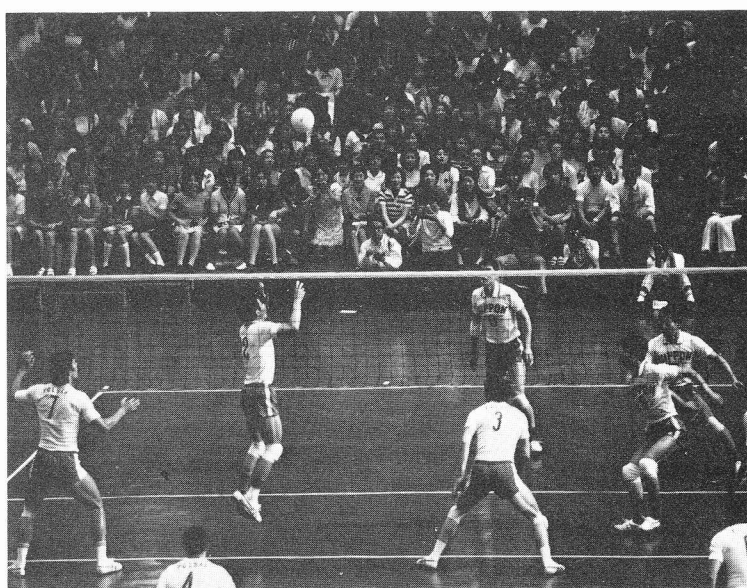
Shimaoka, trying to set with very low posture.

## The Setter:

The ball is sent to the setter from the player who receives the serve. After the setter anticipates the opponent's intention regarding their blocking and digging, he sends the ball to the spiker he thinks will be the most effective in this situation. The decisiveness of the setter is the most important thing during the games. In a sense, the setter is the brain of the team. He is like the conductor of a symphony. I always say to the setter, Nekoda or Shimaoka, "I will do all the things which are required to win by the beginning of the match. After the opening whistle of the match, you, as the setter, have to do everything we need in order to win". During the games a setter has a big responsibility, sometimes even more than the coach.

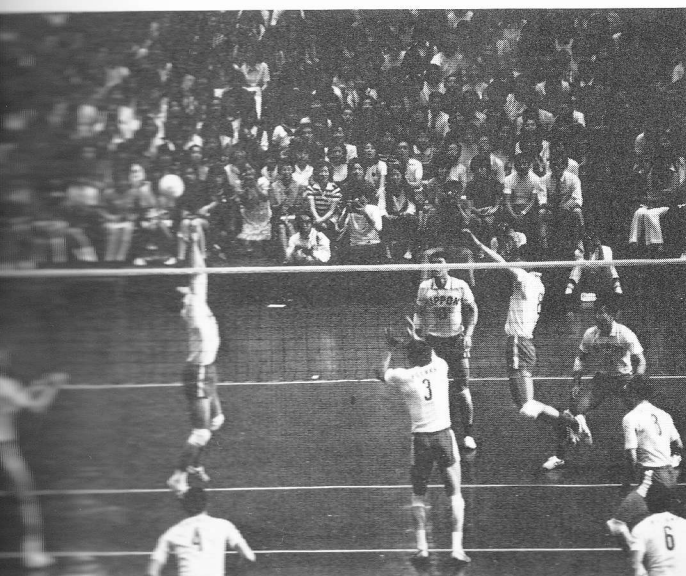
The Japanese men's volleyball speedy movement and quick combination attack system is based on the setter's anticipation and decisiveness. When we make a Zikansa (time differential) attack, the setter makes the decision to set to the faster spiker or to the later spiker after he anticipates the intention and movement of the opposing blockers. If he makes a mistake in his anticipation, then the spiking is shut out by the blockers, even when he sets to the quick middle spiker or to the outside spiker. Success in spiking depends on the setter's anticipation and decisiveness. The more complicated the tactics of volleyball have recently become, the more accurate the plays should be. Even when the ball is not well controlled in the pass from the receiver to the setter, the setter should accurately set to the spiker who is supposed to be

the best according to the situation, considering where the spikers are at the moment and how they are moving. Therefore a setter must have high techniques and skills, keen perception, decisiveness and experience.



1

Back set by Shimaoka, faking the blocker. Morita jumps with a B-quick attack to fake the blocker.



2



3



### **Nekoda, Number 1 Setter of the World:**

It was at the Tokyo pre-Olympic Games of 1963 that Nekoda came to the National team as a setter from the Senbai Hiroshima (Japan Monopoly Corporation, Hiroshima), where he had played for two years after his graduation from Sotkou High School. He was only 19 years old at that time. He played with the setter, Denachi, as a sub setter in the Tokyo Olympic Games in 1964. After the World Cup in 1965, he has been the only setter who is called the "brain" of the National team. He was still younger at 24 years, than the veteran setters of the world. Monzorefski of the Soviet Union, Gorian and Msiel of Czechoslovakia, Zsand of East Germany and Schbeck of Poland were all over 30 years old when we attended the Mexico Olympic Games. The indecisiveness which came from Nekoda's lack of experience kept us from winning the match with Czechošlovakia and unwillingly made us finish with the Silver medal.

Nekoda's bitter experience in Mexico brought great progress to him. He was at last awarded "the best setter" at the World Cup in 1969 and at the World Championships in 1970, two years in a row. He could easily set to the spikers, Morita, Kimura, Yokota, and Oko, anticipating the opponents moves and deciding who was best in each situation.

He constantly showed excellent techniques and skills of defense as well. He was the "conductor" of the National team. It was quite natural that he got the reputation as the Number One setter in the world.

In the autumn of 1971 when we were carrying out our plan for the National team, centering around Nekoda for the Munich Olympic Games, he suffered a broken right arm during practice and was compelled to be absent from practice for more than six months. It was a shattering blow for us. Fortunately he was able to come back to the National in time for the Munich Olympic Games. He learned how important it is for us to be patient during his stay in the hospital. When he came back to us, he was not improved technically or physically but he had improved mentally due to his long absense from practices. His accident was therefore not all bad.

Jump set by Nekoda



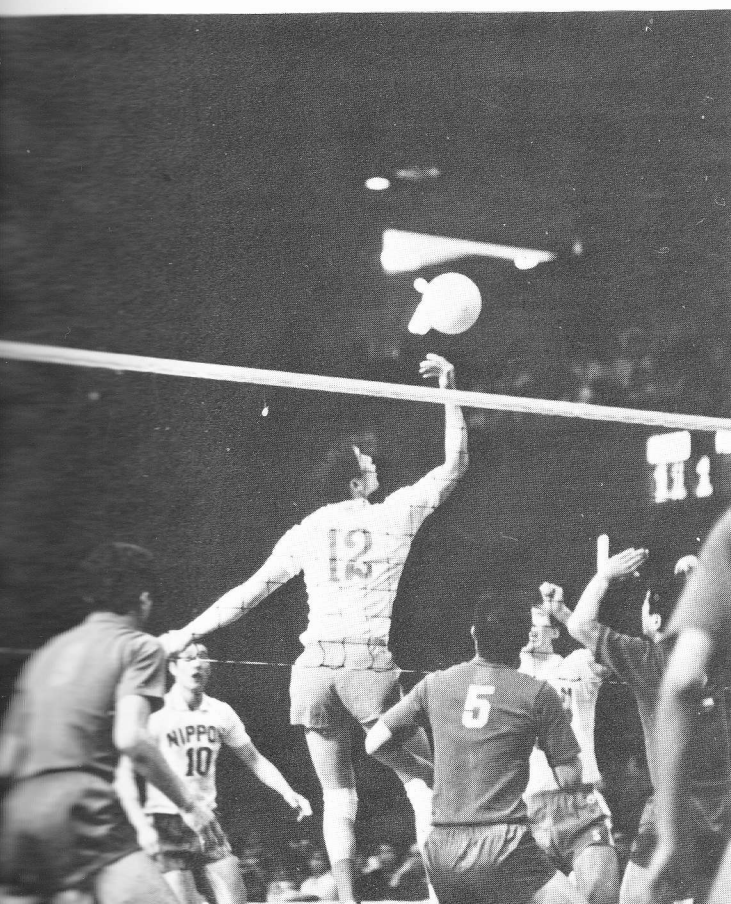


## The Growth of Shimaoka:

Nekoda's misfortune helped his mental development and at the same time promoted the growth of Shimaoka as a setter. It was in the spring of 1968 when Shimaoka was a senior student at the high school attached to the Chuo University, that he came to the National team. He attended the Mexico Olympic Games at the age of 18. I had great respect for his good defensive skills and quick reactions, and for his excellent float serve.

Shimaoka, who was good at defense, serving and quick attacks was an all-round player. In other words, he could do nothing better than others, but he could do everything well. The specialists such as Nekoda Morita and Kimura played most of the time during the matches. Shimaoka often played as a substitute for serving and digging in the Olympic Games, the World Cup and the World Championship. When Nekoda was injured I decided that Shimaoka should be the setter in place of Nekoda as Koizumi who was our substitute setter, was not very good at that time. Shimaoka had the good fortune to develop as a setter. He performed quite well in the international matches with Czechoslovakia in the autumn of 1971 and with the Soviet Union in the spring of 1972. Although Shimaoka did not have the same experience,

Shimaoka is trying to set with one hand. The ball travels very high and close to the net.



anticipation and accuracy as Nekoda, he was better at attacking, blocking and setting the balls that came close and very high at the net, because he was taller at 1.86 metres than Nekoda at 1.76 metres.

Ikedo would sometimes tell me that we had only five spikers with Nekoda but we could have six spikers with Shimaoka. He emphasized that with Shimaoka, we could be much better at attacking and blocking than with Nekoda. I was very happy to see the great progress of Shimaoka who could substitute for Nekoda and could play better than any other player even as a substitute, in any position.



Shimaoka spiking on the line. The back set is from Nekoda (1) Jump back set by Karlov of Bulgaria.

• **Rivals to Nekoda and Shimaoka:**

There are two types of setters. One is the talented type and the other is the steady type. Nekoda has both characteristics while Shimaoka is very close to being the steady type.

The top level setters of the talented type in the world are Karlov of Bulgaria, and Kodelka of Czechoslovakia. Both often make a smart and fine play with quick perception. On the contrary, when their quick perception doesn't work well in the games, they play so terribly that they seem to be different people.

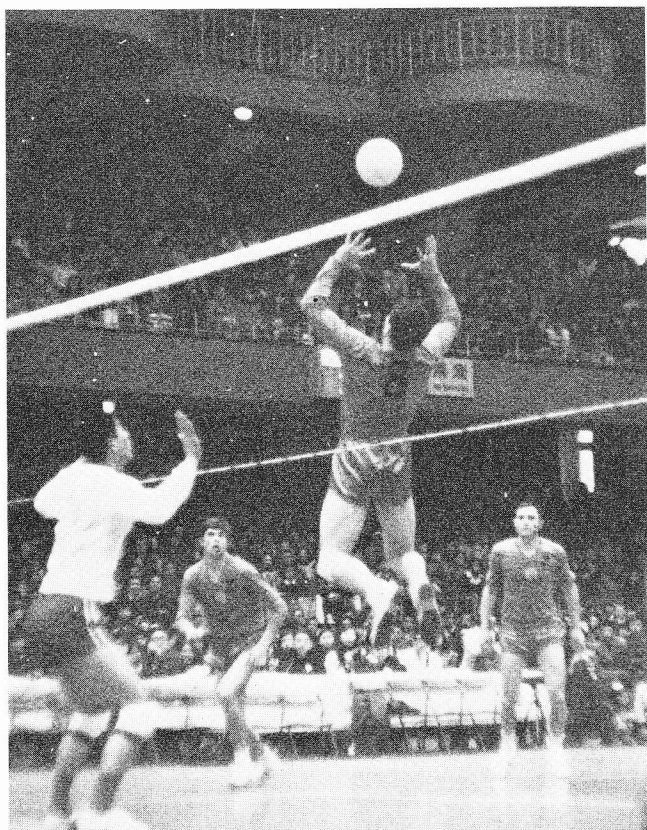
The steady type players show very little difference when they are playing well or not very well. They always play consistently. Stanski and Domani of the Soviet Union and Pitsch of East Germany belong to this type. They play very carefully and consistently at their setting. Starnski has the characteristic trait of steadiness, as well as some of the characteristics of the "talent" type setter. Stancho of Czechoslovakia doesn't belong to either of these two types. He is a very tall setter at 1.98 metres. When he can spike successfully, he sets very well. Once he starts to make mistakes in spiking, he sets very badly. That may be due to his nature and his youth (he was born in 1949). He may be called a "fickle" setter.

It is quite natural that the team which has better setters will win the championship of the world. We dare say that the rank of the team depends on that of the setter when we compete with the top teams in

the Munich Olympic Games or in the World Championships. The Japan National Men's Team with two setters, Nekoda who is the Number One setter in the world and Shimaoka, who has great potential as a setter have a clear advantage in the quest for the World Championship.



Set by Starlnski of the Soviet Union.





## Patterns of Attack

The serve is received successfully and the ball is sent to the setter. He sets to a spiker and the spiker hits the ball. This is an attack. The attack is divided into five patterns.

1. The second hit attack,
2. "A" quick attack,
3. An attack from outside (an open attack),
4. Spiking sets from behind the setter (a two step attack),
5. Back row player's attack.

"A" quick attack is done with the machine-gun type of spikers, and the open attack, two-step attack and back row player's attack are done by the cannon type of spikers. Morita, Kimura, Nakamura, Fukao, Shimaoka and Nishimoto belong to the machine-gun type and Yokota, Oko, Saito and Noguchi belong to the cannon type. Minami and Shimaoka are setters and machine-guns, Mitsumori is a machine-gun and sometimes a cannon.

These machine-guns and cannons are combined systematically. We call it our combination attack, which fakes the opposing blockers and receivers. A Zikansa attack (a time differential attack) is a good example. (Player #3 in for a quick hit followed by a second player directly behind or to one side of the #3 player).

### Spiking:

The main weapon in attacking is the spike. It is an offensive play that usually drives the ball into the opponent's court with such great force that it

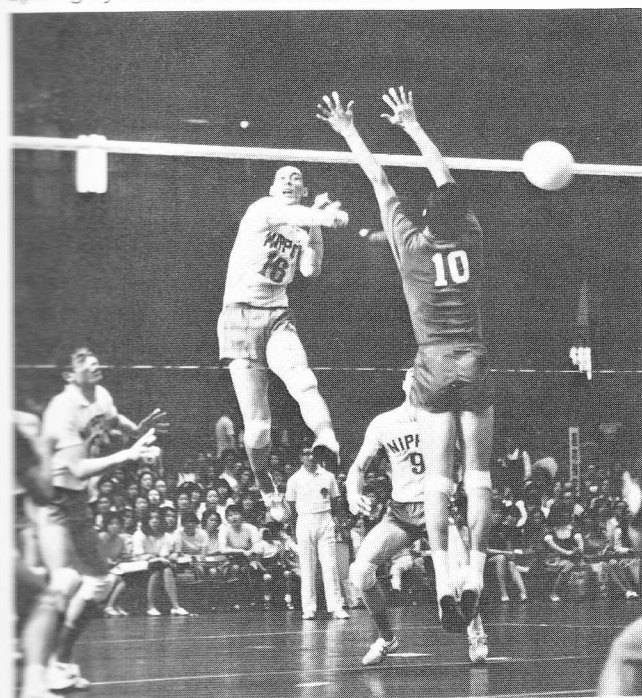


makes the players happy and fascinates the spectators. The spiking of a machine-gun player is a little different from that of the cannon player. The former is required to move fast, act quickly and hit the ball sharply. The latter is required to hit the ball with great force. The contact point with the ball is the same for both. Players are required to make contact at the highest point.

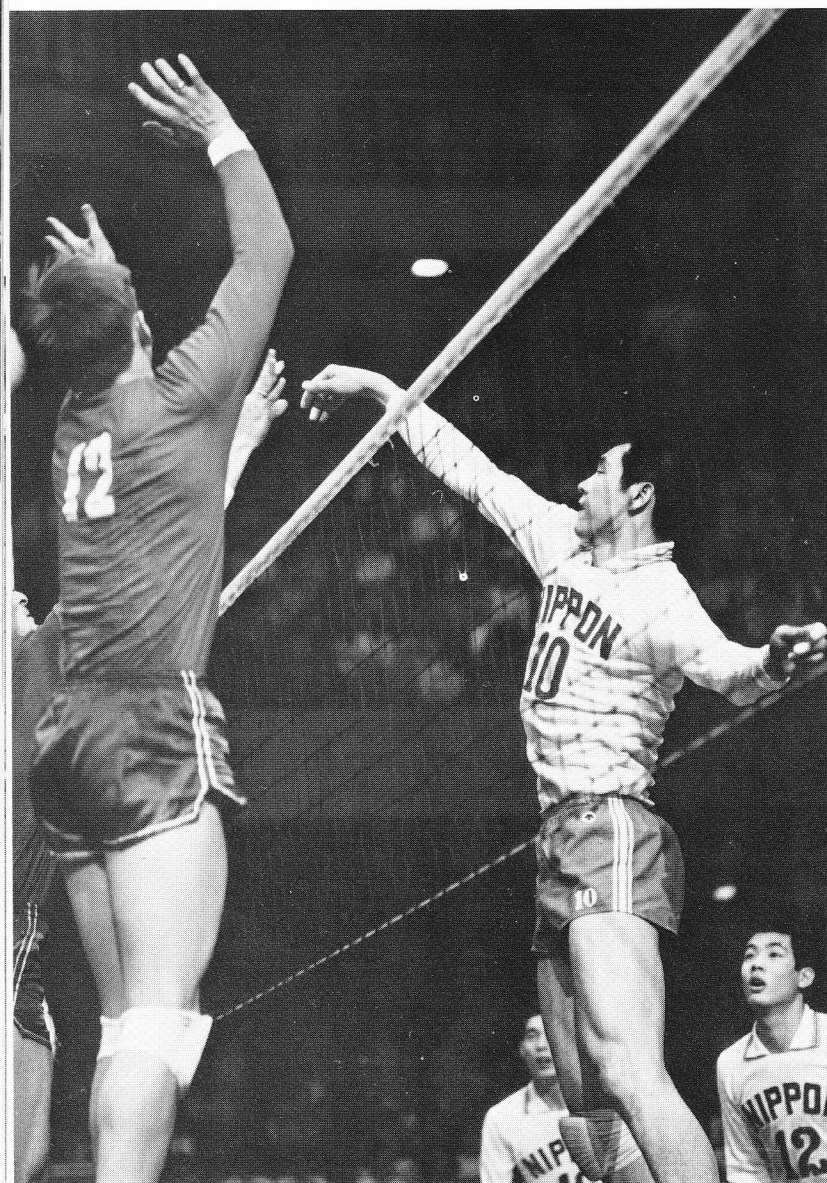
Freibart of D.D.R., is spiking at Nekoda (No. 2), side of blocking. (See the action of his wrist)



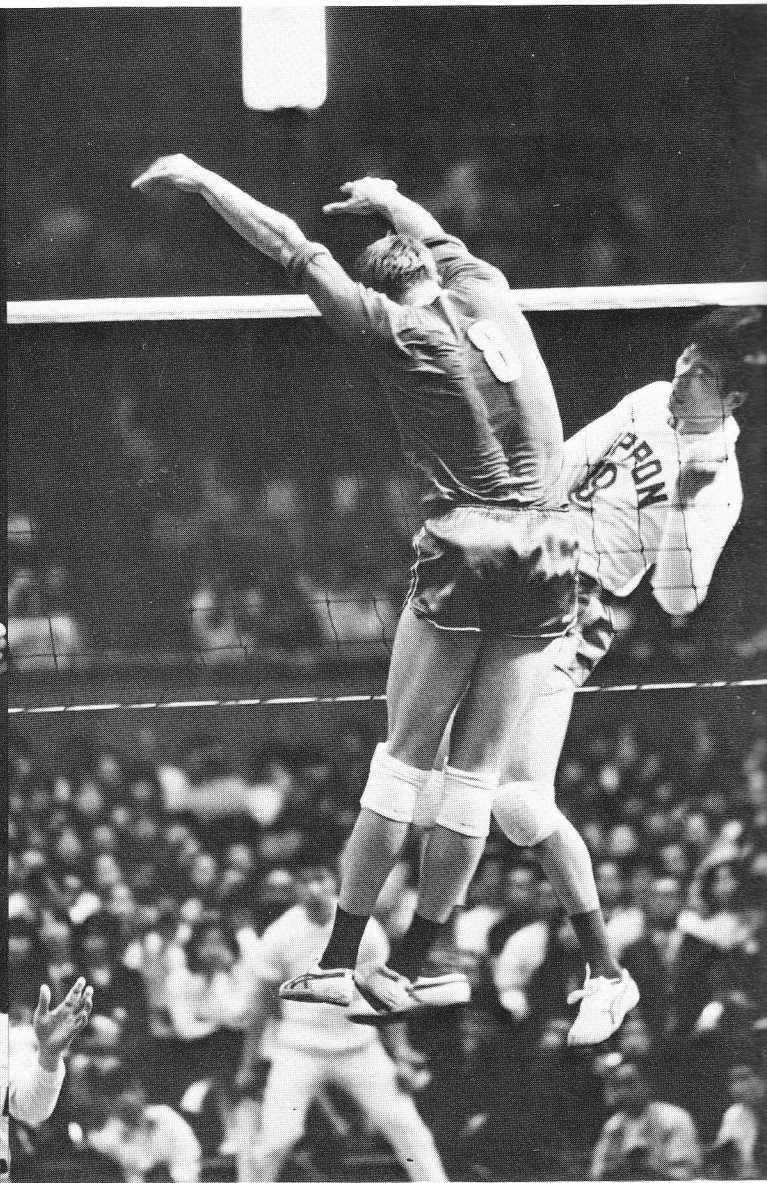
Spiking by Minami: at the centre front.







Tip by Oka.



Powerful spike on the shallow cross court by Morita.

The basic techniques of spiking are:

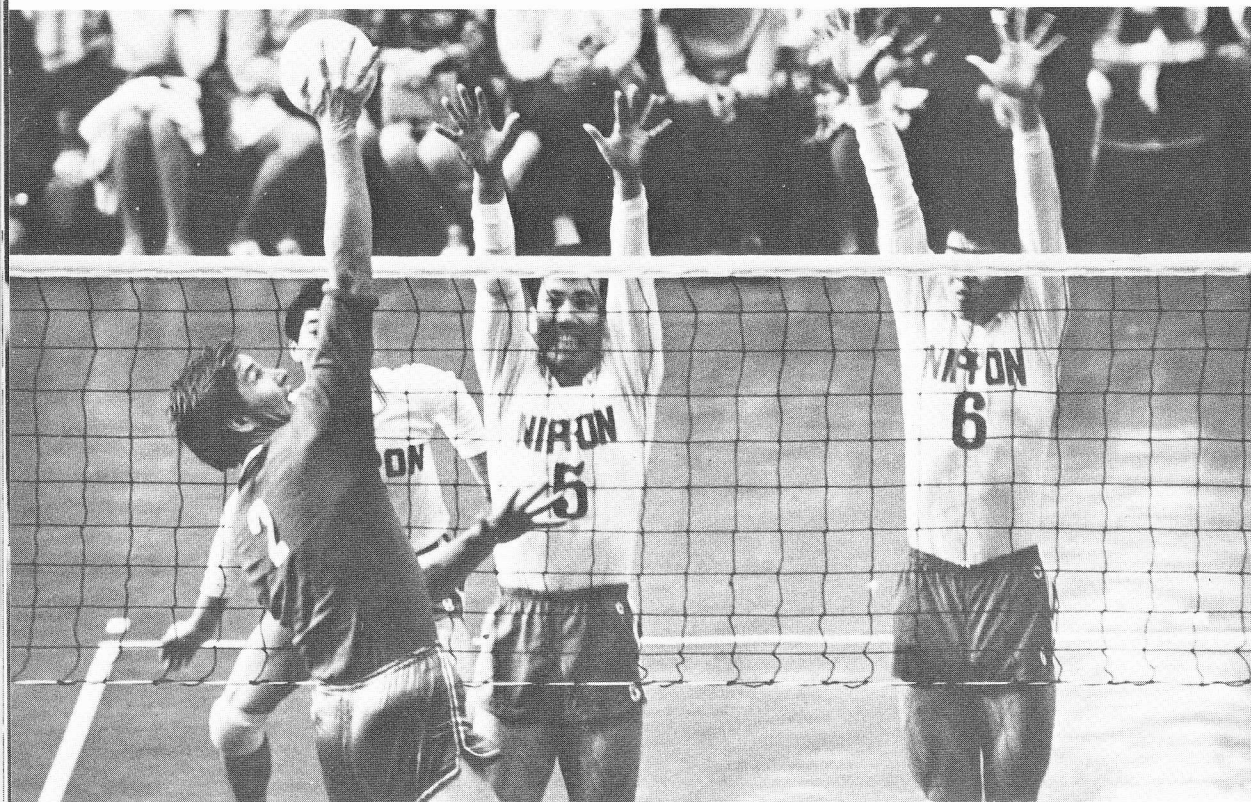
1. Take a relaxed ready position before approaching (in order to spike well no matter where the ball is set).
2. Jump looking at the ball and keep looking at it until the ball is hit. (in order to get a good contact with the ball).
3. Jump as high as possible with a big arm swing and hit the ball at the highest point with a fully stretched arm.
4. Hit the ball with a quick arm action and with momentary power. Spike with the whole body; arm, shoulder, upper body, stomach, back, hip, and so on.
5. Place the spike anywhere on the court by turning the wrist and arms at the last moment.
6. Think and be ready for the next play after spiking.

#5 above is very important in order to wipe off or to make a rebound play when the opponent's block is not perfect. #6 above is to recover the ball blocked by the opponents. You can see the big difference between a successful recovery and an unsuccessful recovery on the blocked ball. A successful recovery brings an effective return attack. Serving and blocking are easier to get points. So a successful recovery prevents us from losing easy points. Therefore, we have precisely practiced recovery techniques for long time. The desire to prevent losing easy points has helped us make great progress.



Spiking by Oka, others are taking a ready position to cover.





Tip by Kravchenko.

### Tip Shot:

The tip shot is a soft spike that is used to catch the defense off guard. It is used most effectively on a good set when the defense is expecting a hard spike. The defense is still, therefore the receivers cannot move to the ball that is about to drop behind the blockers on into an open spot.

Even if the tip shot is not successful at that time, it has a big effect. We can drive the rhythm of the defense mad and put it out of order, with a hard

spike and then a tip shot. For example, if a spiker makes a tip shot after a hard spike, the opposing blockers and receivers cannot anticipate the spiker's intention and they are likely to take the defensive system in stages. That is to say, they are very confused mentally and will only plan one step at a time. Meanwhile the spiker spikes or makes a tip shot successfully.

Recently the best shots have been used more than before. The attacker straightens his spiking arm in

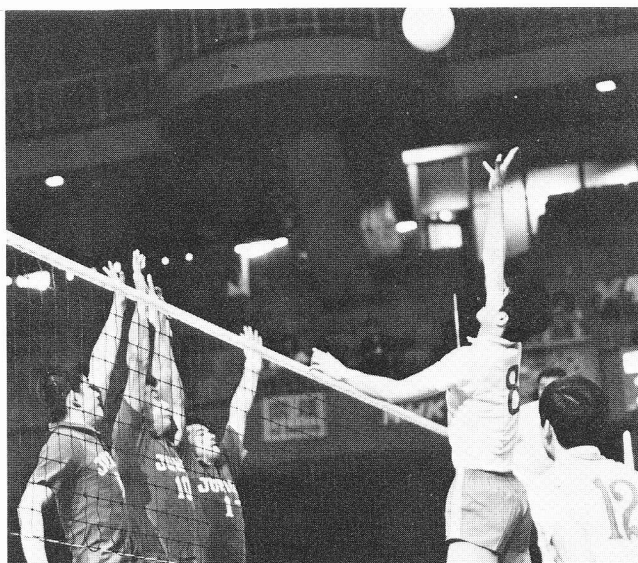




the normal manner and swings at a reduced speed to contact the ball with his fingertips, as if he is slightly slapping the ball down to the floor, just after he makes sure of the correct course for the drop.

The tip shot is with speed and is very hard for a receiver to dig. It is most effective for the attacker to place the top shot in the area close to both side lines behind the blockers or to the open spot in the middle of the court. The players who often use this kind of tip shot are Morita, Oko, Chulak of the Soviet Union, Petlak of Czechoslovakia and Schneider of East Germany.

In addition to this, there is a pass attack, an open spot attack. It is used when a player finds the weak points, the open spots or an area of great confusion in the opponents during the rally. A setter sometimes makes a pass-attack (a fake setting attack), pretending to set. Nekoda is very good at a pass-attack. He stands by the net and makes a pass-attack to the space behind the opponents left spiker, just after he comes up to the net to block. This is just after he starts to move forward. He is unable to move back and dig. Nekoda often gets points this way.



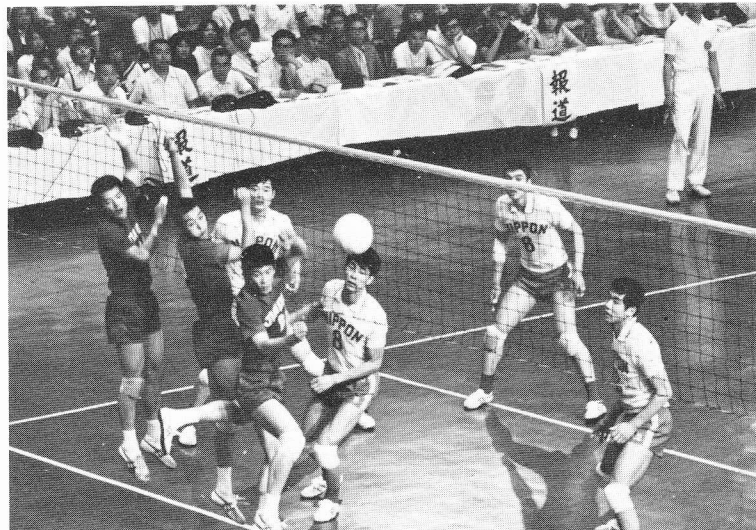
Tip by Morita.

Tip by Morita.

- (1) Taking a ready position for spiking with a big arm motion,
- (2) As soon as he contacts the ball, his arm relaxes, stretching his elbow and pushing the ball down on the shallow cross court.
- (3) The blockers are trying to receive the tip, but cannot as it is done with speed.



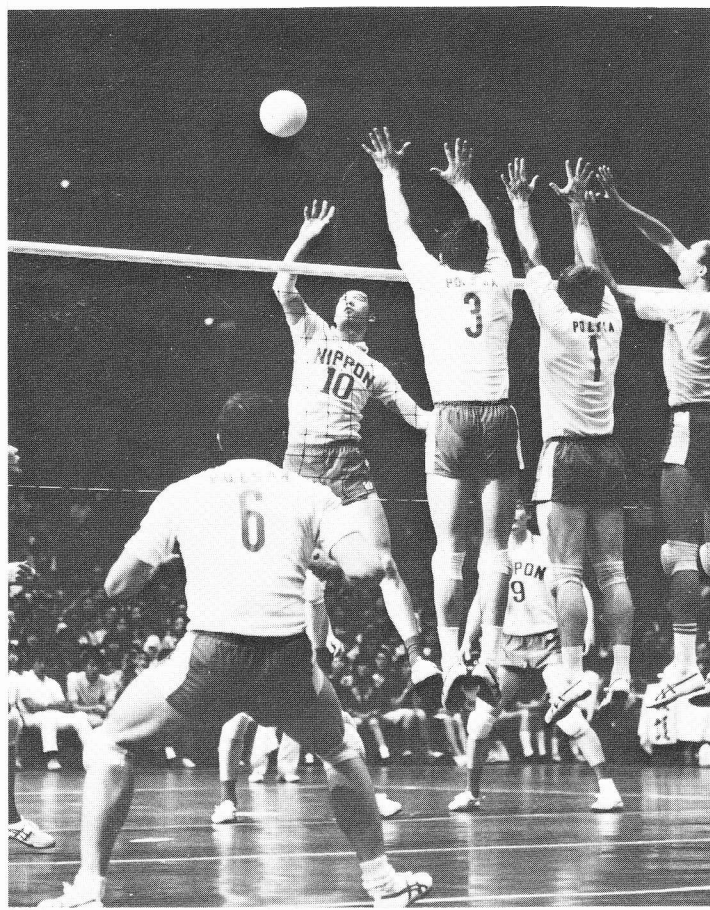
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Fake setting attack by Shimaoka. (Blockers jump for an A-quick attack by Kimura, while the ball is sent to the shallow right side of the opponents court.)



Tip by Oko in match against Poland.



### Wiping Off:

When the opposing blockers are completely involved in a multiple block, using this technique and hitting the ball into the out-of-bounds area almost always results in a point of side out.

We can naturally wipe-off when we hit the cross court spike with power during our open attack. The palms of the inside blocker are likely to face outside, against an open attack. However, when his hands stick out over the net, even if they face outside, the wipe off does not result in success. Therefore, we need an intentional wipe-off technique.

When a spiker tries to wipe off intentionally, he hits the ball at the outside half of the outside hand of the outside blocker with such great force, that his outside hand is forced to face outside and the ball goes out into the out-of-bounds area. In the case of the set going very close to the net, a spiker contacts the ball in a lateral motion as if he is pushing it to the blocker's outside hand, and then wipes out. Kimura often uses this technique on his open attack at the right front.

When a spiker uses it in the middle, he hits the ball at the blocker's fingertips and drives it far beyond the end line. Even if one of the opponent's receivers can dig it, the opponent cannot make an effective attack. The technique is often used by Morita,

Schneider of East Germany, Schritz of East Germany, Kravchenko of the Soviet Union, Petlak and Schink of Czechoslovakia.

(Note: This last technique was extremely useful under the rules prior to 1977.)

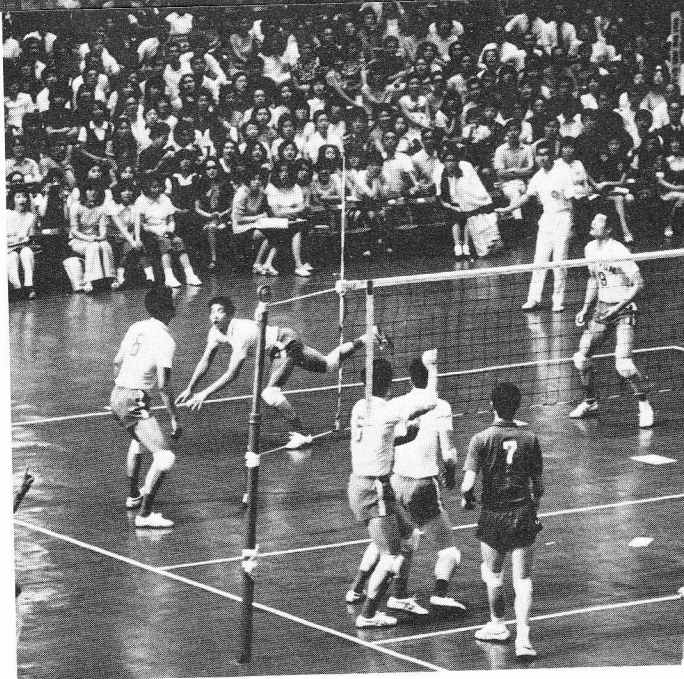
Wipe-out. (spiker hits the ball at the outside hand of the outside blocker).



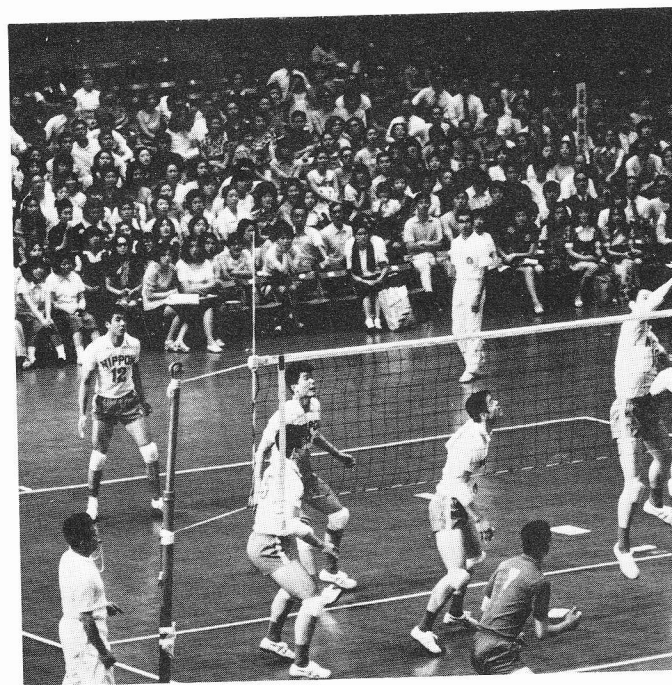




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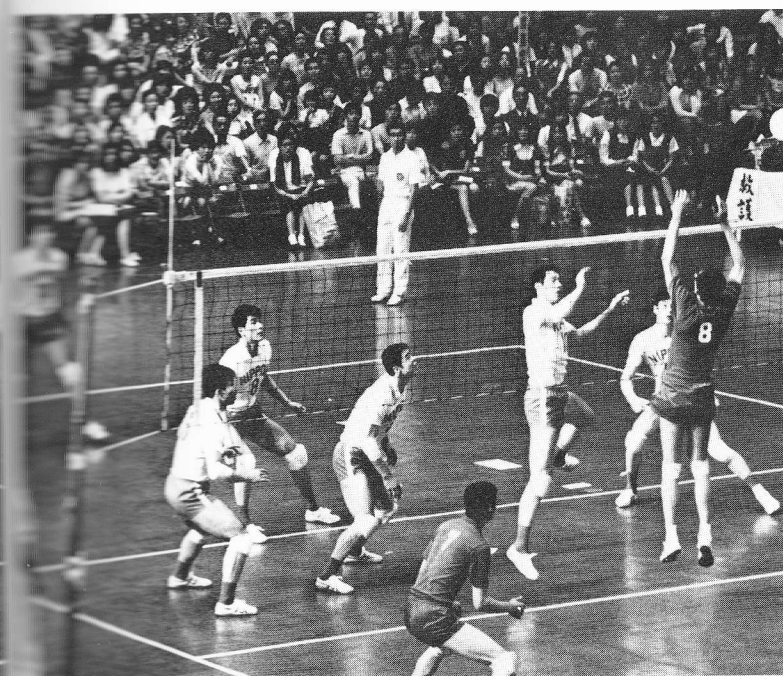




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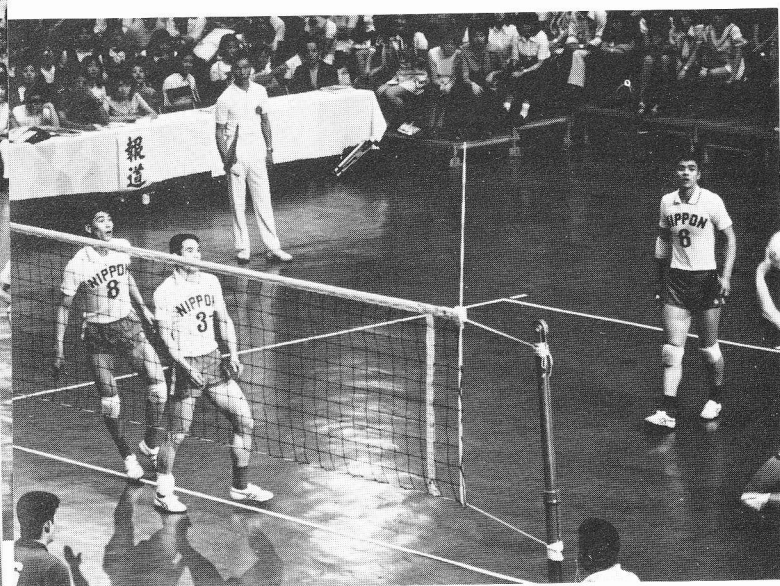
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- (1) Fukao (No. 6) and Kimura (No. 5) are blocking,
- (2) Shimaoka receives the ball after the blockers hit it,
- (3) The ball travels high and close to the net,
- (4) When Oko tries to spike it, the blocker on the opposing team waits for the spike,
- (5) The spike may be shut out if he hits. So he jumps,
- (6) He hits the ball at the outside hand of the blocker,
- (7) And he wipes out.





### A Rebound Play:

Hitting the ball slightly into the block usually results in the ball rebounding softly back into the attacker's court, allowing the offense to recover the ball and giving them another chance to put the ball away.

Before the rules allowed the hands of the blockers to reach over the net, this technique resulted in another chance to attack or created a net fault of a passing the hands over the net fault. Since the rule was changed, after the Tokyo Olympic Games, the blockers' side has taken advantage of a rebound play. Now a spiker slightly hits the ball into the block without power just after pretending to spike hard and the spiker's side waits for the ball to rebound back.

Morita and Oko, cannons of the Japan National team, were often shut out by the blockers in the Mexico Olympic Games. They could do nothing but spike with power. They have mastered various techniques for a spiker since then. A rebound play is one of them.

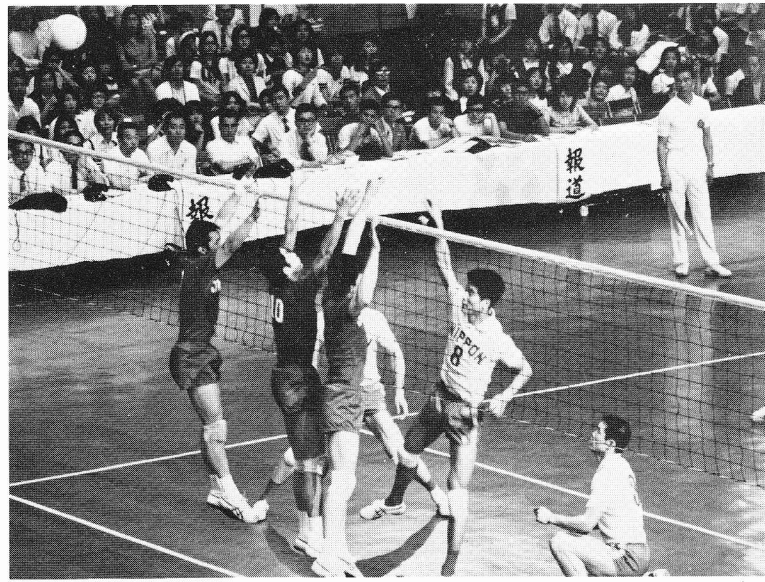
It is much easier to spike with power without consideration of or for the opponent's block, than to use a rebound play, according to the situation. A spiker is required to be patient when he uses a rebound play.

Morita and Oko are called top level spikers in the world, because they have been able to be patient enough to use a rebound play.

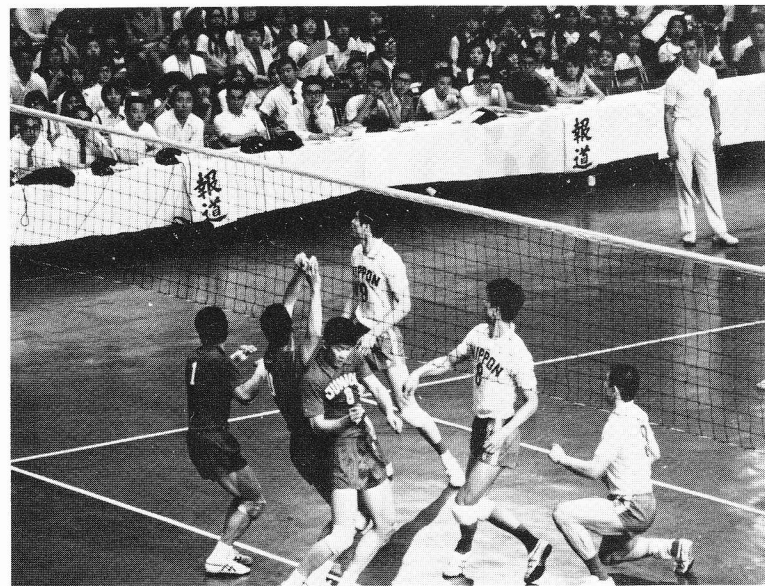




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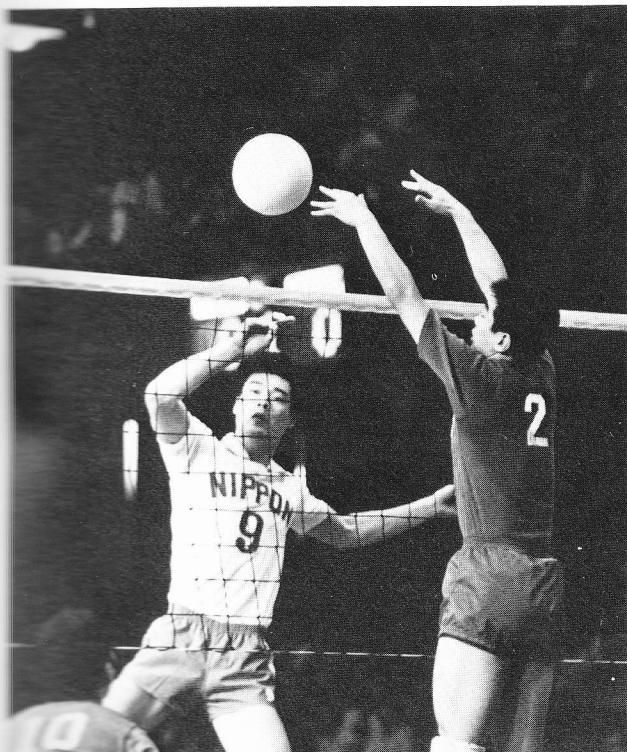


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Morita is trying to get a rebound ball against the blockers.



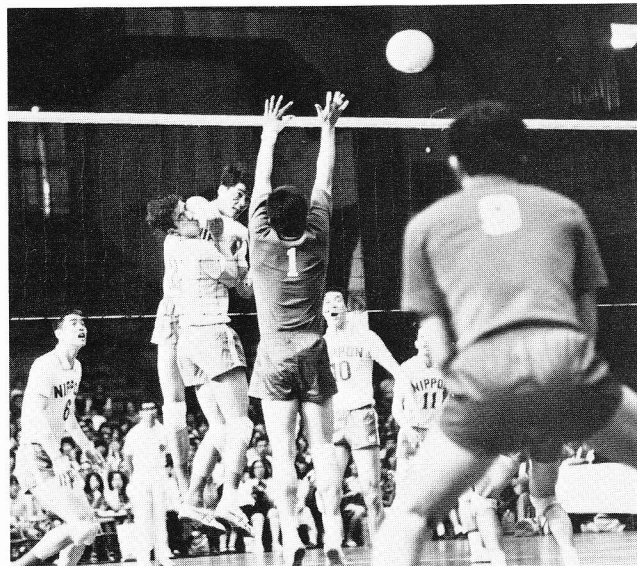
Wipe-out.

- (1) Shimaoka at the left sets the ball to the middle spiker,
- (2) Morita is trying to spike it,
- (3) Three blockers are against him,
- (4) At the moment he spikes, he changes the course and hit to the blocker's outside hand,
- (5) He wipes out.

### A Second Hit Attack:

Three touches of the ball are permitted in volleyball. Generally the first hit is a pass, the second a set, and the third a spike. (Note: the rules after 1976 allow 3 hits after a touch on the block). We sometimes spike on the second hit. We call it a second hit attack. It is often used by a setter when the ball is passed to the setter, a little high and close to the net. The opponent's blockers and receivers are expecting the attack on the 3rd hit and therefore do not have enough time to get ready for a second hit attack. It is very successful except if the ball is hit at both arms of the receiver. It is more successful when it is used intentionally.

When the ball is sent to the top of the net, almost three feet away from the setter, he runs to the ball with his setting posture and spikes it. This happens very often when he is likely to be called on a double hit if he sets the ball. Shimaoka can use a second hit attack much more effectively than Nekoda. One of the top setter in the world.



A snatch spike by Morita.

### A Snatch Spike:

This is a variety of a second hit attack. The ball is sent to the setter a little high. He tries to set it by jumping. Just before he sets it, a spiker spikes, running behind the setter directly to the front of him.

Morita is very good at a snatch spike. He spikes the ball as if he snatches it from the setter. When the opposing blockers see the setter take a ready position and Morita approach with speed, they expect an A quick attack. In the meantime, Morita jumps from behind the setter and spikes just before the setter contacts the ball. This technique was created by Morita.

### 'A' Quick Attack:

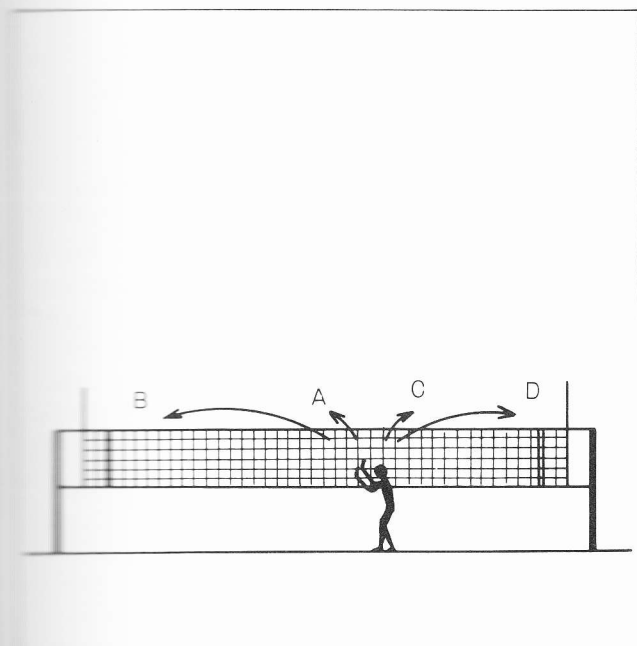
Just before the setter sets the ball to the spiker, he jumps and waits for it in the air. as soon as the ball is sent to him from the setter, he spikes as quickly as he can. This is an 'A' quick attack, which is a basic technique of a quick attack system. It takes the shortest time of all attacks for the ball to travel from the setter to the spiker. We have used the same technique as an 'A' quick attack in the 9 man game. In those days, we slapped the ball instead of spiking. We called it a **quick slap**. Since a slap attack was forbidden by the rules, a spike is now commonly used. In any event, a quick attack started to be adapted to the 6 man system volleyball and was the main weapon of the Japan National men's team in the Tokyo Olympic Games.

The opponent's blocker cannot block an "A"-quick spike if he makes any hesitation. If he wants to block it successfully, he must take a ready position for blocking and pay attention to the movement of the quick spiker before the ball is set. All the players of the Japan National team can spike a quick set which will give much trouble to the opposing team. As Japan's National team has used it for the main weapon for a long time, many players of foreign countries have imitated and mastered the quick attack. Starlnski and Zaiko of the Soviet Union and Stancho of Czechoslovakia are very good at this technique.

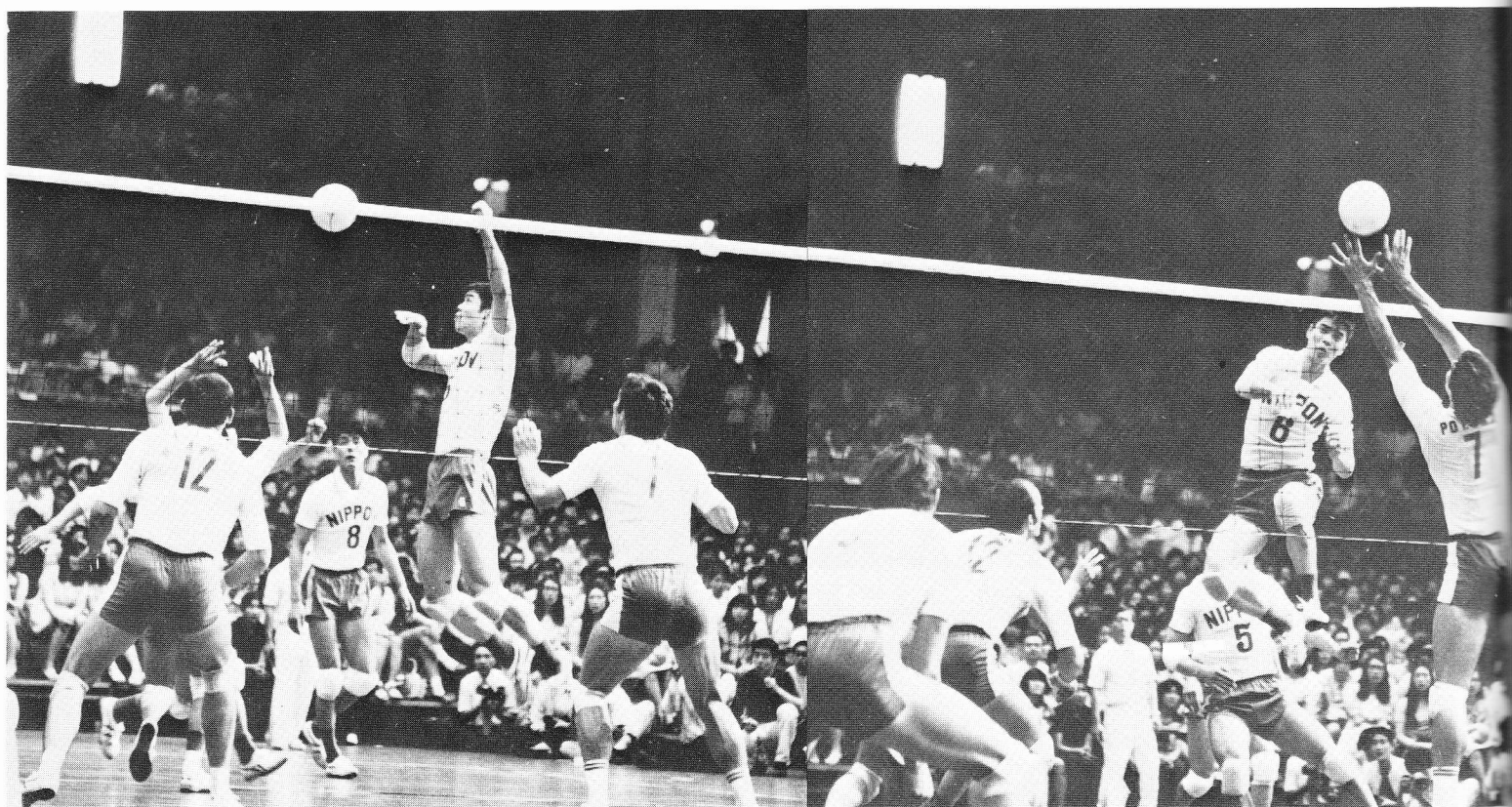


An A-quick attack by Morita.

Quick sets (A,B,C,D).







An A-quick attack by Fukao. (Fukao waits for the ball in the air before the setter sets).

### **'B' Quick Attack:**

The distance between the setter and spiker is approximately one metre in 'A'-quick attack, and two or three metres in a 'B'-quick. A spiker has to jump to hit a 'B'-quick set with the same timing as an 'A'-quick attack. When a setter sets for an 'A'-quick attack, he sends the ball over his head in a vertical or oblique line. In a 'B'-quick, he sends it to a spiker with a short shoot set. The ball travels parallel to the net and just above it. A spiker waits for the ball in the air and then spikes it sharply.

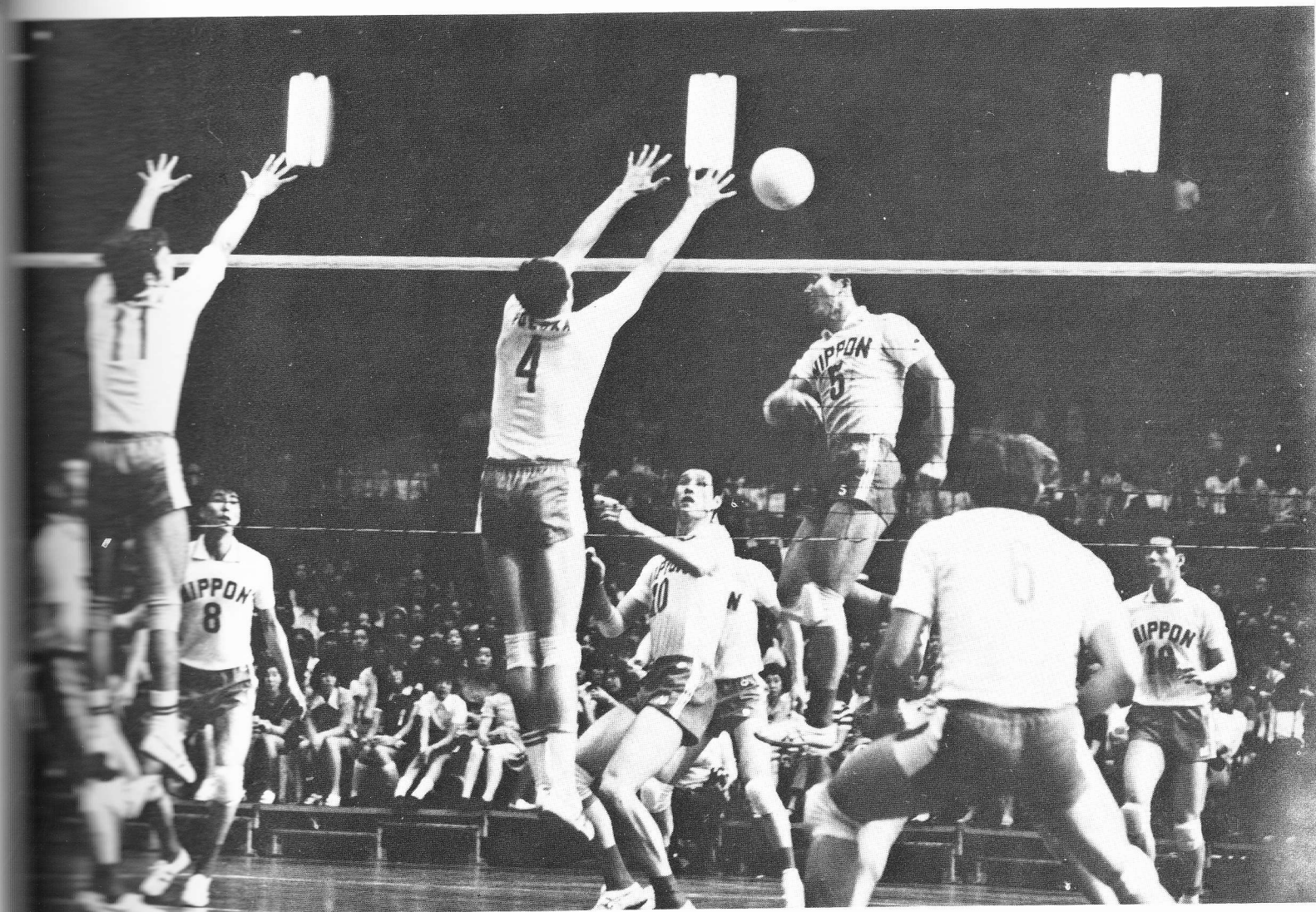
Until the Tokyo Olympic Games an 'A'-quick attack of the Japan National team had been amazingly effective against foreign players. Foreign teams began to get accustomed to an 'A'-quick attack and were able to form a better block against the 'A'-quick attack. They started to use it for their tactics. This meant that our 'A'-quick was not as effective as before. Moreover, the revision of the rule that allowed passing of the hands over the net after a spike inflicted decisive damage to our system. We had to create a new technique to supplement the 'A'-quick. At last, we organized a 'B'-quick to replace the 'A'-quick.

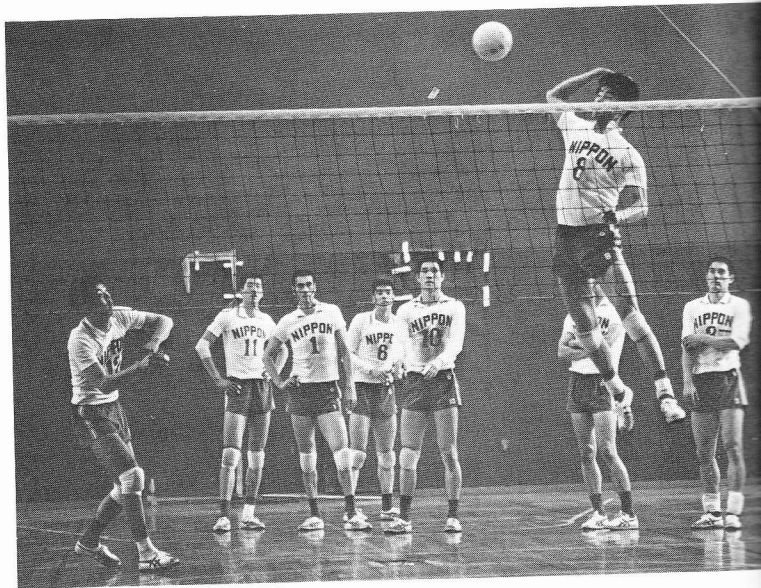
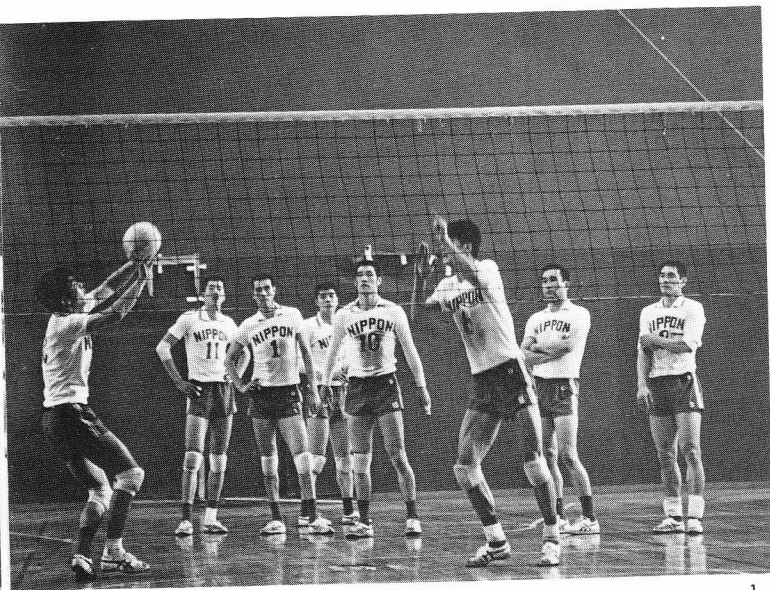
In 1965, Kimura, succeeded in using a 'B'-quick attack for the first time. He came up with this after he had researched and practiced ways to fake out the opposing blockers. He wanted to find a better attack than the 'A'-quick.

A 'B'-quick attack is actually much more useful in matches than an 'A'-quick, because a setter can set a 'B'-quick set wherever he may be within the attack area. But, in an 'A'-quick attack, a setter cannot set unless the ball is passed to him near the net.

A 'B'-quick attack needs more accurate setting and timing between a setter and a spiker, as both have a longer distance between them than in an 'A'-quick attack. Thanks to the 'B'-quick attack, the 'A'-quick attack has been revived again. The combination attacks using a 'B'-quick attack with an 'A'-quick, results in confusion in the opponents court. Few teams in the world, outside of Japan, can spike a B-quick set. (Note: this was written in 1971). Karlovzratanov (Bulgaria), Starnski (Soviet Union) and Borsh (Soviet Union) have seldom used it since the World Championship in 1970.

A B-quick attack by Kimura. (He changes the ball's course with only an arm action).

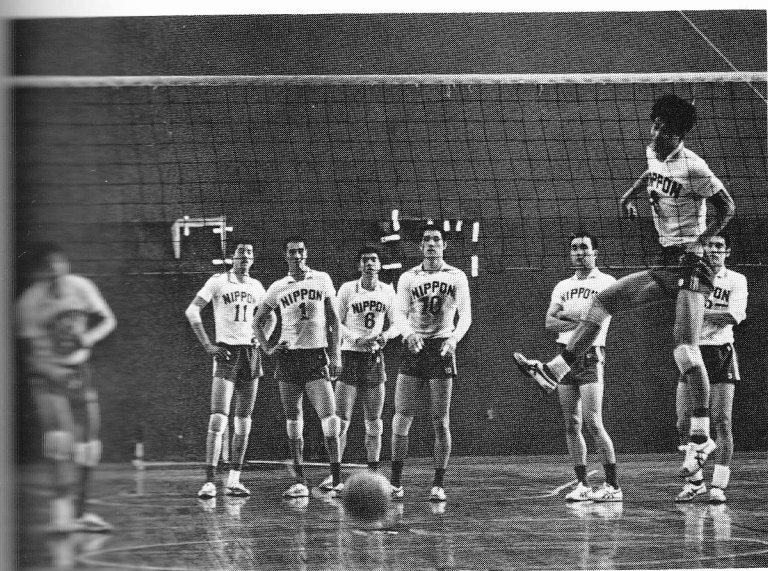




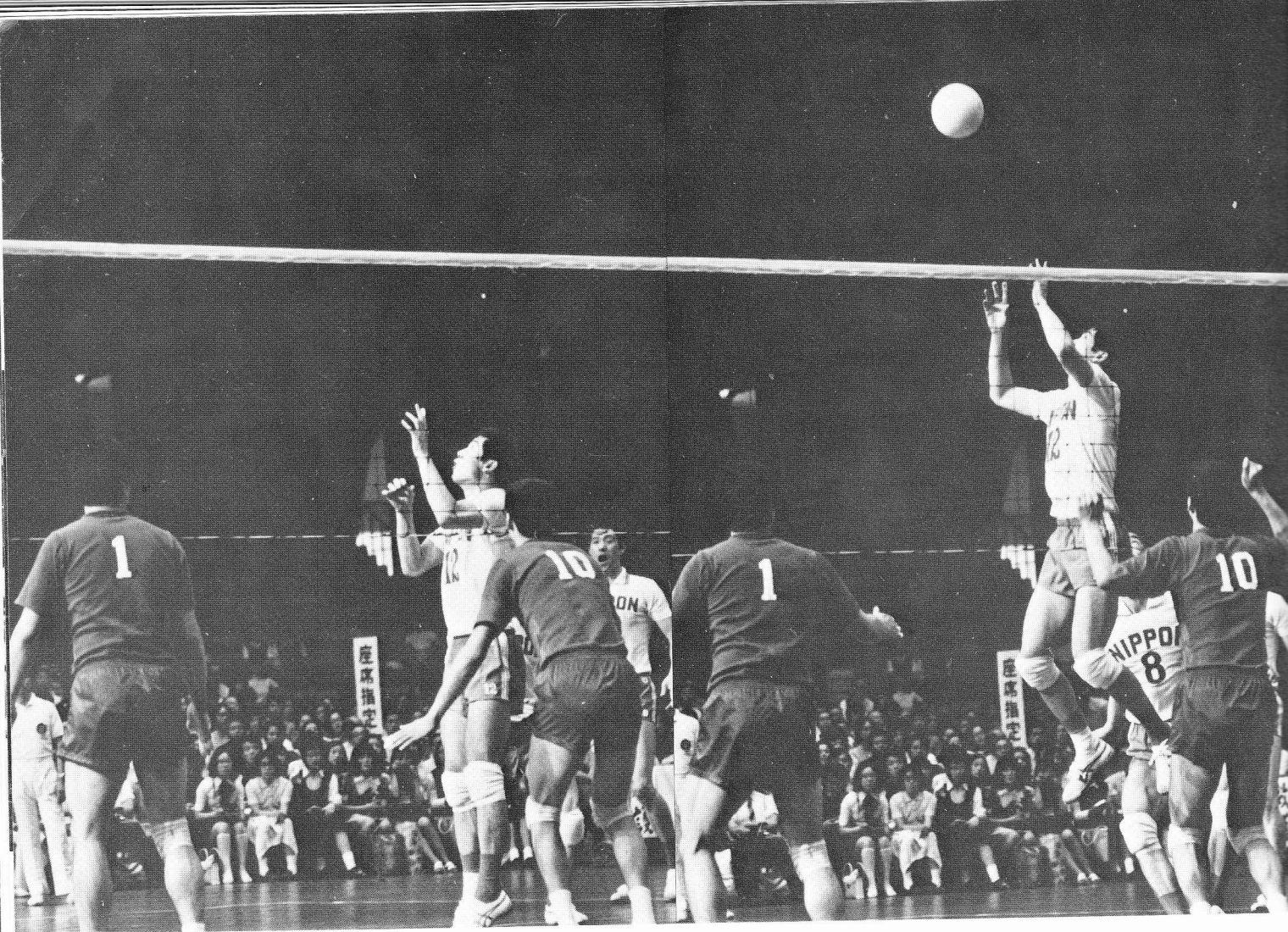
A B-quick attack.

- (1) As soon as Shimaoko sets, Morita takes off,
- (2) Morita waits for the ball in the air,
- (3) He spikes with power.





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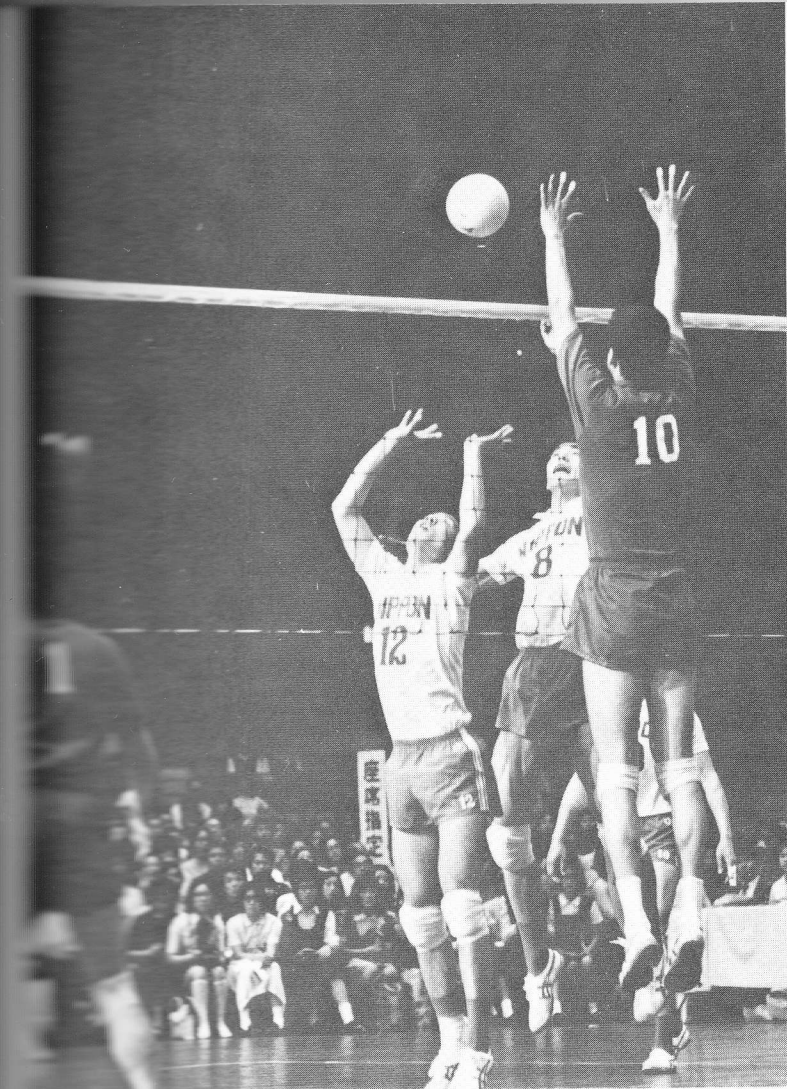


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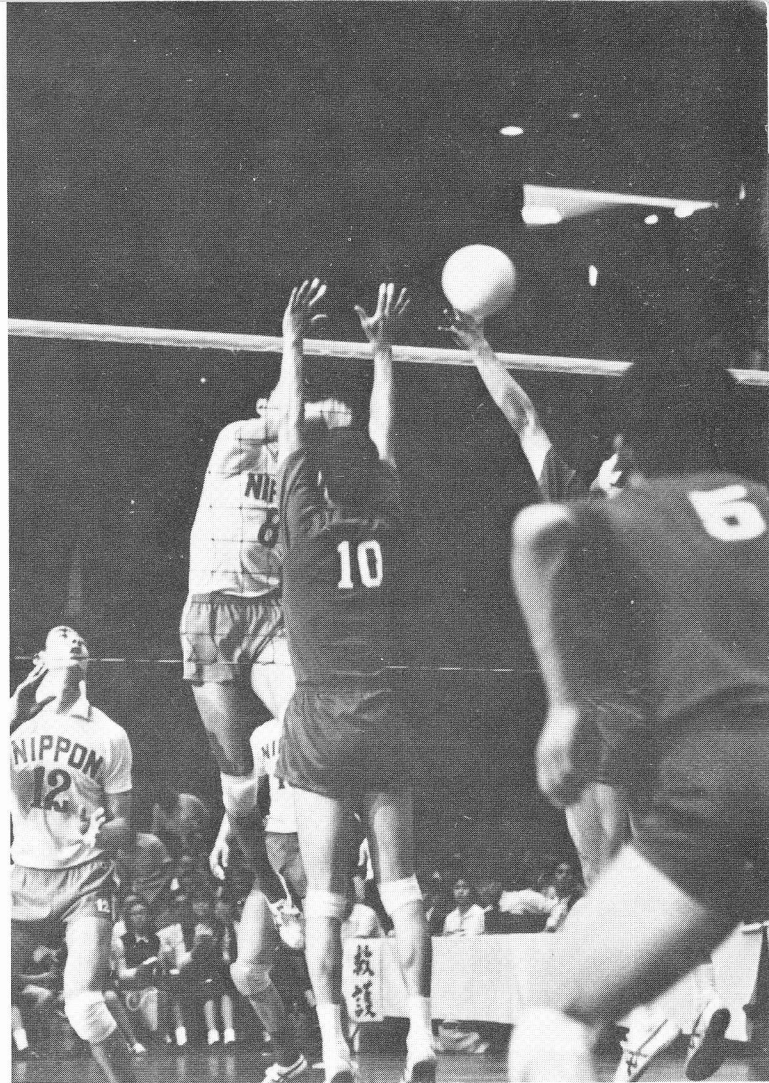
### **'C'-Quick Attack:**

In order to stay ahead of other top level teams in the world, we have to constantly create new tactics and weapons. After we created the 'A'-quick attack and the 'B'-quick attack, and then used them very effectively in matches, many countries began to use them for their own weapons. Therefore, we had to create more advanced weapons. A 'C'-quick attack is one of them.

A setter and a spiker face each other when they try an 'A'-quick attack. When they play a 'C'-quick attack, the spiker runs in behind the setter and hits a back set with the same timing as an 'A'-quick attack. This tactic was developed by Morita, Kimura and our setter, Nekoda. The key to the success of the 'C'-quick attack is in how a spiker and a setter fake the blockers, in order to give the appearance of an 'A'-quick attack. Therefore, it is very important how and when a spiker runs behind the setter from in front of him. No one in the world, except Japanese players, can successfully play a 'C'-quick attack. It is a unique weapon of the Japan National team. (Note: written in 1971).



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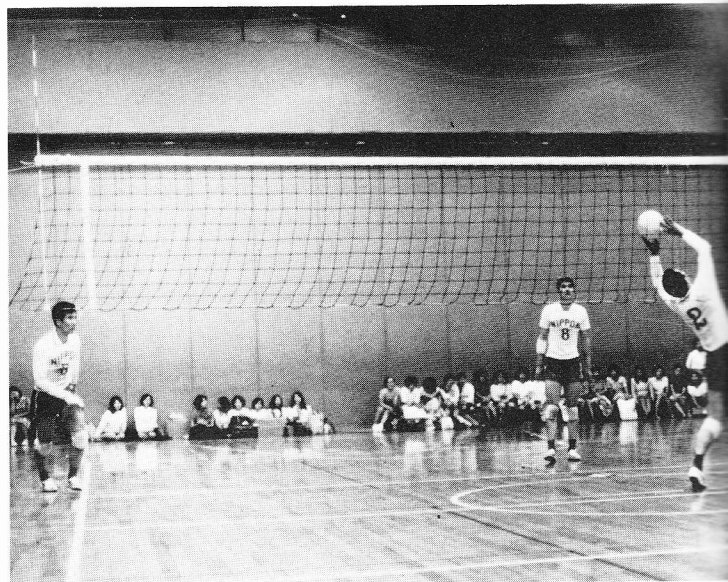


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#### A-Quick attack.

- (1) The ball is passed to Shimaoka,
- (2) He tries to jump set,
- (3) He sends the ball to Morita with a jump back set with the same timing as an A-quick attack,
- (4) Morita waits for the ball in the air and spikes at the moment of contact.





### **'D'-Quick Attack:**

A spiker hits a shoot-back set from the setter with the same timing as a 'B'-quick attack. This is a 'D'-quick attack. Kimura is very good at hitting a 'D'-quick set. He spikes down the line from the front right and effectively wipes off the blockers. The 'D'-quick attack as well as the 'C'-quick attack is used only by Japanese players. Both techniques create problems for foreign players.

### **Kimura, the Core of a Quick Attack**

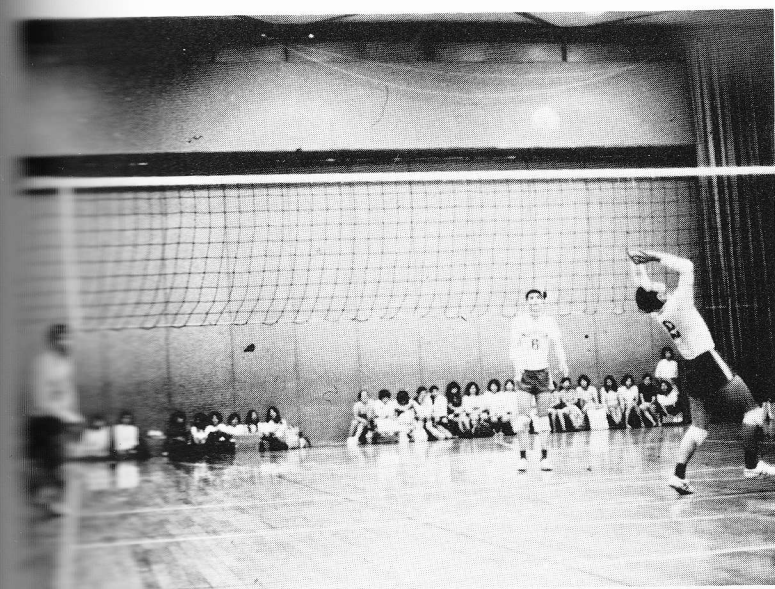
Kenji Kimura came to the National team in 1965, when he was a second year student at Chuo University. He was very famous for his power spiking, at his height of 1.85 metres. He was very miserable with his unsuccessful spiking during the tour to Europe in June, 1965. The foreign blockers were like a stone wall against his spiking and the receiver could easily dig the balls spiked by him. Kimura knew, as a result of this experience, that he would never be successful in spiking only with power.

A frontal attack was useless for him. He decided to develop his special techniques called 'guerilla' tactics. After he came home, he practiced hard to master an 'A'-quick attack, and also he created a 'B'-quick attack.

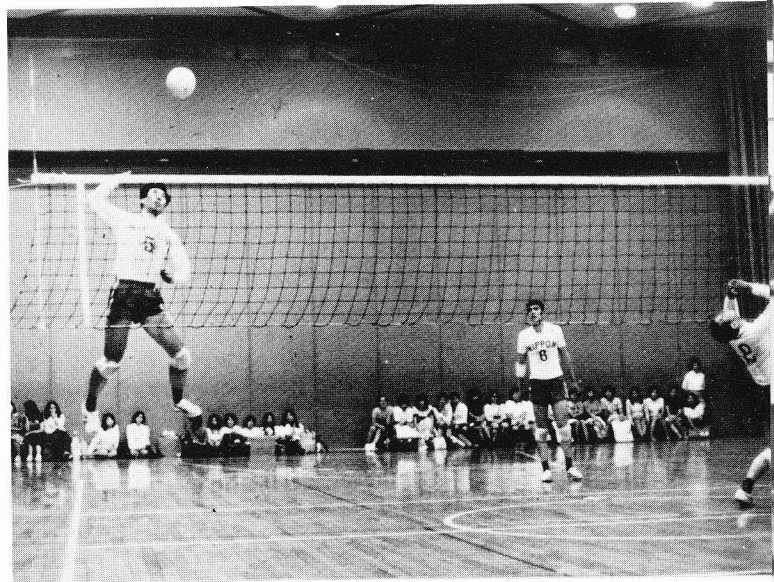
In the World Championships of 1966, he rendered great service to the team with his new technique of the 'B'-quick attack. He was named one of the top six players in the world as a result of the votes by

coaches of all the teams. His earlier miserable experience brought great success to him in the end.

The combination volleyball with speed that the Japan Men's National team excelled at could never have been developed without Kimura and Morita. Kimura can hit quick spikes at the middle very well, spike successfully in the front right, and still be very good at defense and serving. He is joined with Morita on the team and together they form the core of the combination volleyball with speed. The complicated tactics of our team are lead by them. This system, lead by Morita and Kimura creates many problems for foreign teams.



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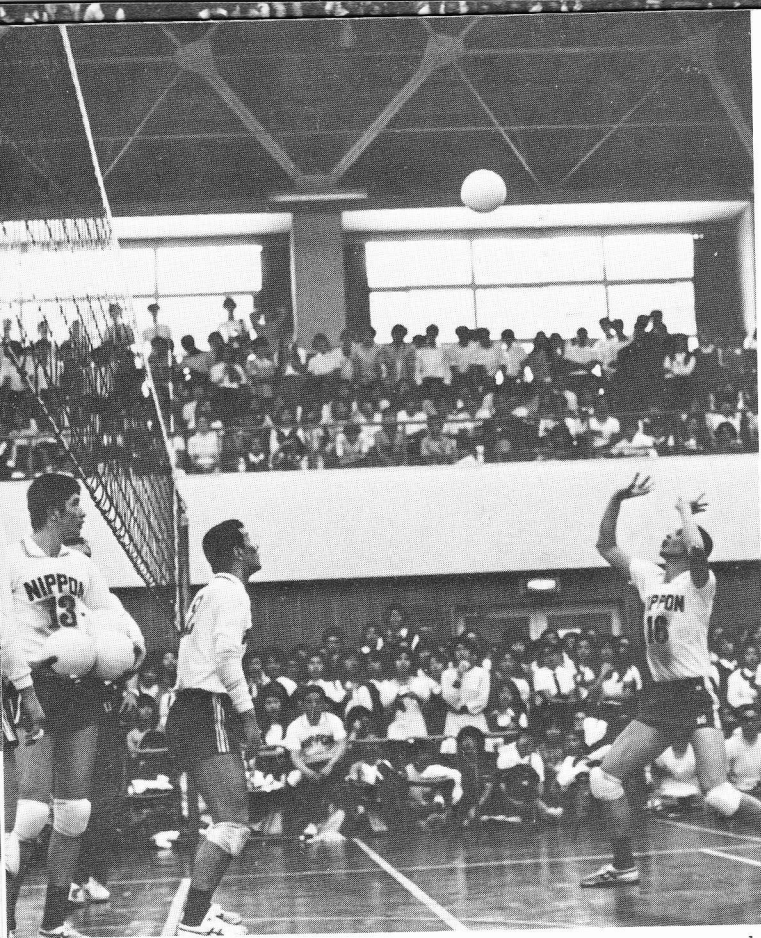


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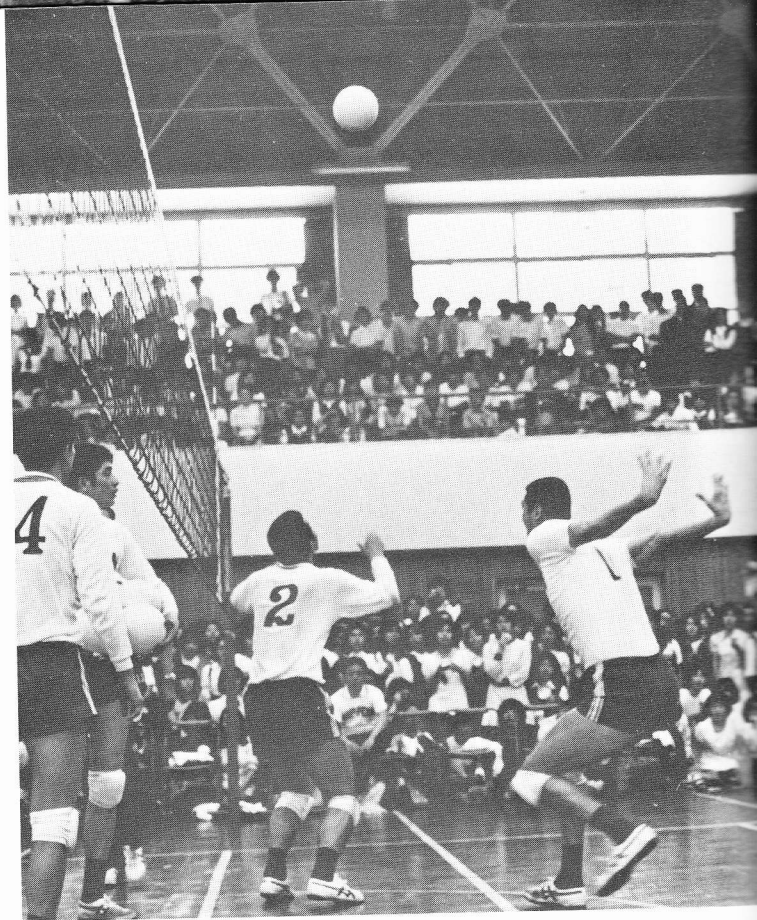
A D-quick attack.

- (1) Kimura starts to approach at the same timing as a B-quick attack, seeing the ball travel to Nekoda (No. 2).
- (2) Nekoda send the ball to Kimura with a back set.
- (3) The ball travels parallel to the net top,
- (4) Kimura waits for it in the air and spikes.





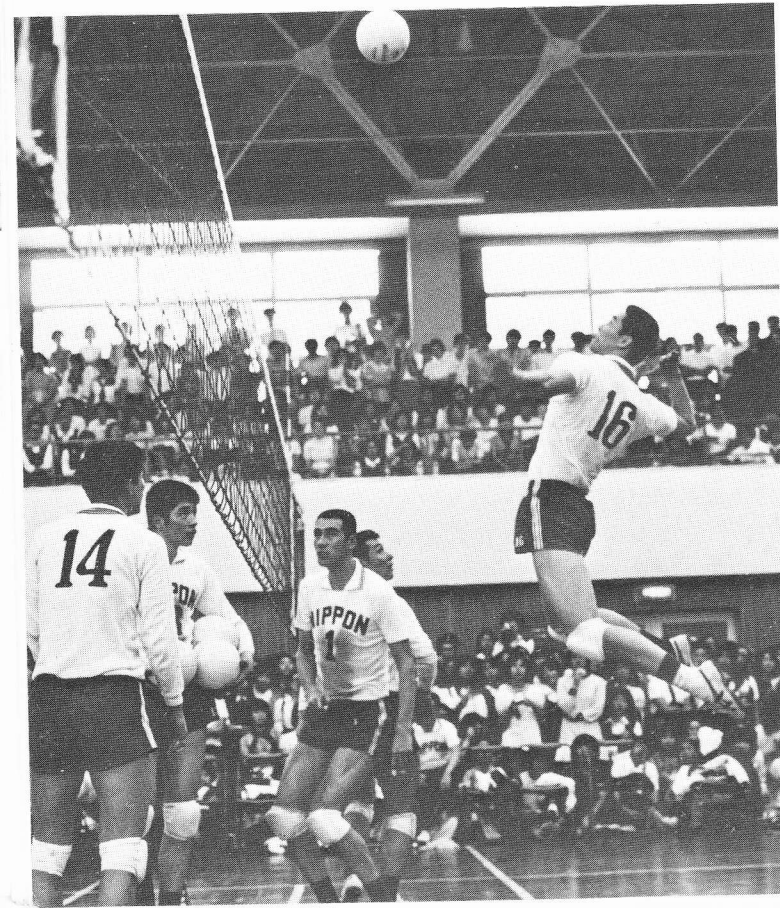
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Basic Pattern (I) of a time differential attack.

- (1) The ball is passed to Nekoda from Nishimoto (No. 16) at the right.
- (2) Minami runs from the left to behind Nekoda with the timing of a C-quick attack.
- (3) He jumps to fake.
- (4) The ball stops far above him,
- (5) Nishimoto runs in from the right and jumps,
- (6) Nishimoto spikes.

5







3

### A Combined Quick Attack (time differential attack)

The Europeans call the time differential attack created in Japan a "Jikansa". "Jikansa" in Japan has been very popular as a volleyball term. This technique is a combination of an 'A'-quick attack and a semi-quick attack, and is done a little later than an 'A'-quick attack.

As the ball is passed to Shimaoka, Kimura runs close to him and jumps with the timing for an 'A'-quick attack. At the same time, the opposing blockers jump to try to block against an 'A'-quick attack. The ball passes over Kimura beyond his reach. He swings his arm without hitting the ball and lands on the floor. The blocker lands almost at the same time, while Saito runs in behind Kimura and jumps a little later than Kimura. That is, Saito spikes just after the blocker lands and is able to successfully hit the ball without any block against him. This is the basic pattern of the time differential attack. Kimura is not always the spiker who tries to take the blocker with an 'A'-quick jump and the spiker who hits the ball with the time differential attack is not always Saito. Saito sometimes tries to take the blockers and Kimura spikes. It depends on the situation. We have a time differential attack with the combination of Oko and Morita. We also have a number of combinations with all the players except Nekoda. However, even Nekoda performs it successfully sometimes. A shorter player can easily do it, because no one can block against him.



4

The semi-quick attack has been very popular in Europe for many years. Recently many players have mastered the 'A'-quick attack. A time differential attack is used in The Soviet Union, Czechoslovakia etc. The European players who can do it are few in number and their techniques are still fundamental. On the contrary, our techniques have been improving for a long time ever since the days of the 9 man system volleyball.

We have developed a number of varieties of the basic pattern. Our players are more advanced in these skills because we have been practising them longer than foreign teams.

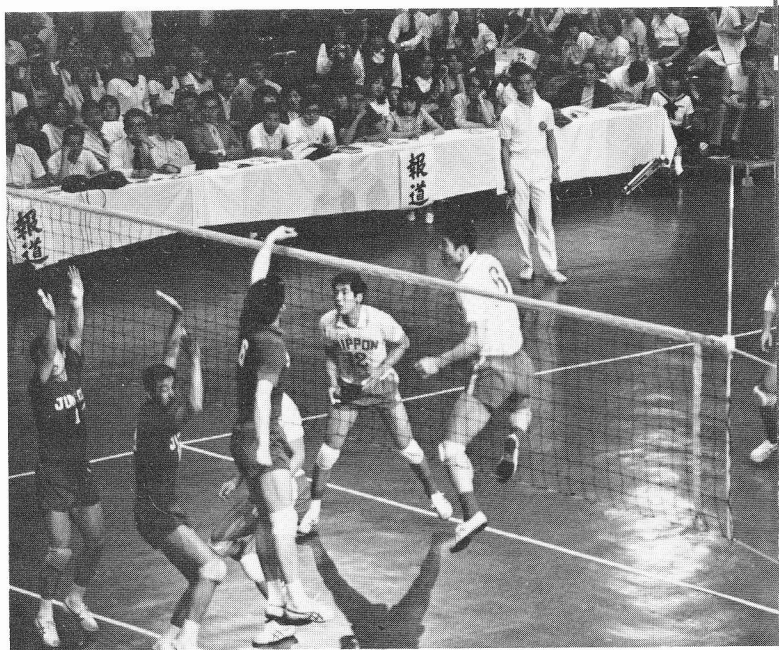


Basic Pattern (II) of a time differential attack.

- (1) Shimaoka sets, while Morita jumps to fake with the timing of an A-quick attack,
- (2) One of the blockers jumps for Morita. The ball is sent to Fukao behind Morita,
- (3) Fukao spikes.
- (4) As the blockers are faked, they cannot effectively block.

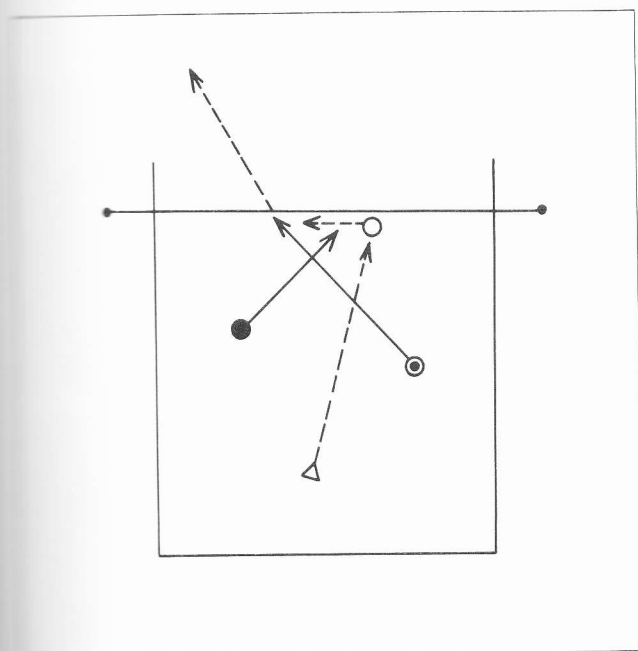


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A combination A-quick and semi-quick attack.

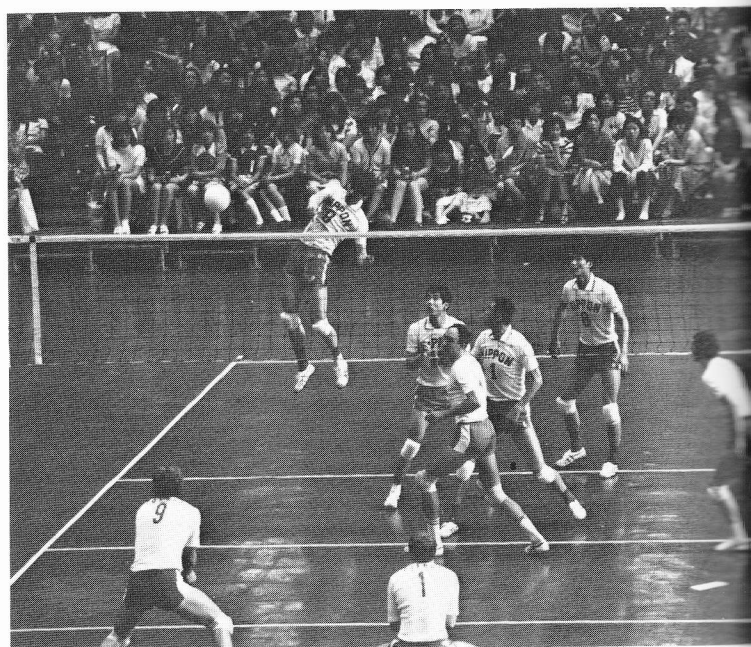


- the ball's travel
- attacker's movement
- setter
- ⊙ spiker
- faker





1



### A Variety of Time Differential Attacks

1. A time differential attack in which an 'A'-quick attack and a 'B'-quick attack are combined.

While Fukao jumps to fake the blocker with an 'A'-quick attack, the ball is sent to Kimura who is waiting for it with a 'B'-quick attack jump. The combination between Fukao and Kimura is only an example. We have dozens of combinations; for example Yokota and Morita, Oko and Morita, and so on.

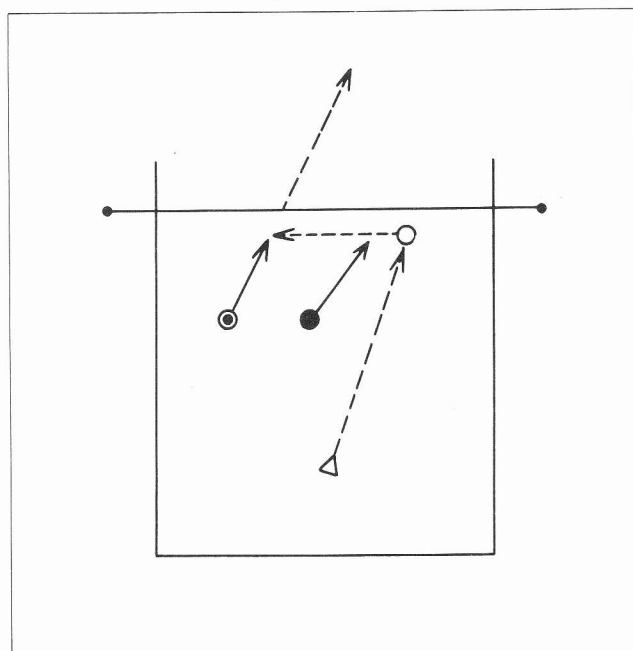
2. A time differential attack which is called an attack in front of "B". When Kimura or Morita jump to fake the blocker at the position of a 'B'-quick attack, the setter sets for a semi-quick attack to the position between the setter and a 'B'-quick attacker. While the blocker hurries back to the position from the position against the 'B'-quick attacker, Oko comes in from the right side and spikes, twisting his body to the left side of the opponent's court while in the air, hitting on the sharp cross court. If he spikes to the right side of the opponent's court without twisting his body, the blockers who are hurrying back are successful against his spiking.

3. A double 'B'-quick attack in which two 'B'-quick attackers combine. When Nekoda sets for a 'B'-quick attack, Morita who waits for it in the air 2 metres from the setter, swings his arm without hitting the ball, and Yokota who also waits for it in the air 3 metres away from the setter, spikes the ball which passes through Morita. If Morita tries to hit before Yokota does, he can. The blockers on the

Basic Pattern (III) of a time differential attack.

- (1) Minami jumps to fake with the timing of an A-quick attack,
- (2) Shimaoka sets backward and Yokota hits a semi-quick set from him. No one can block.

A combination A and B-quick attacks.



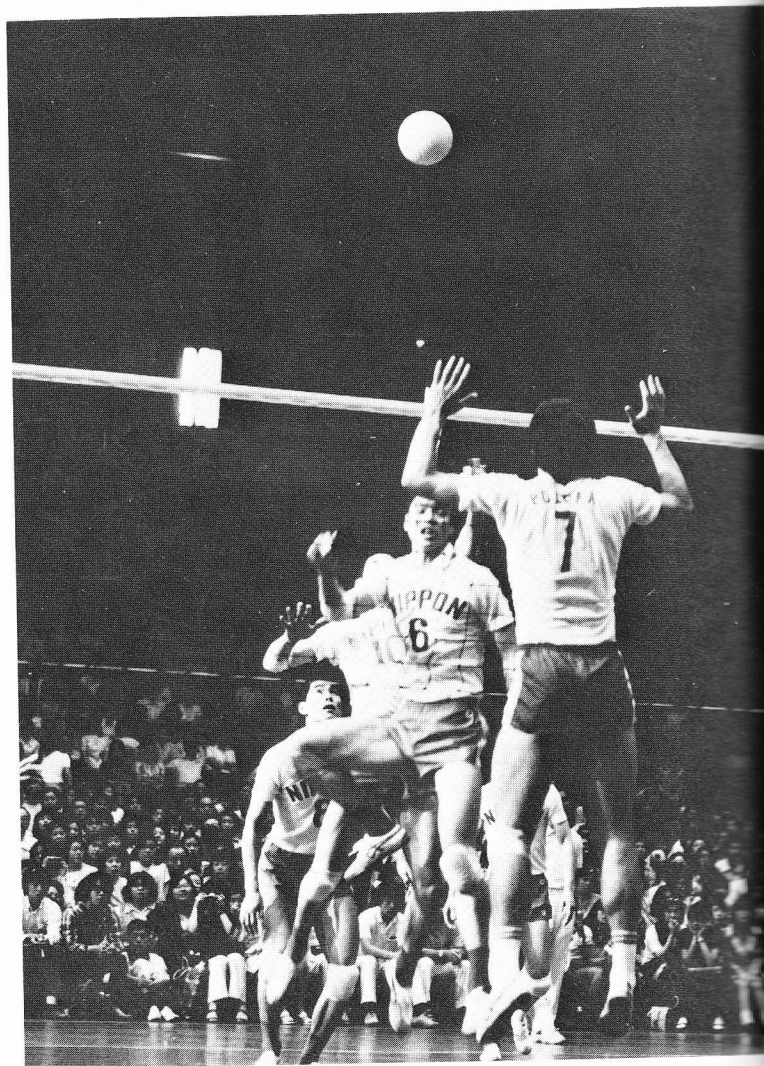
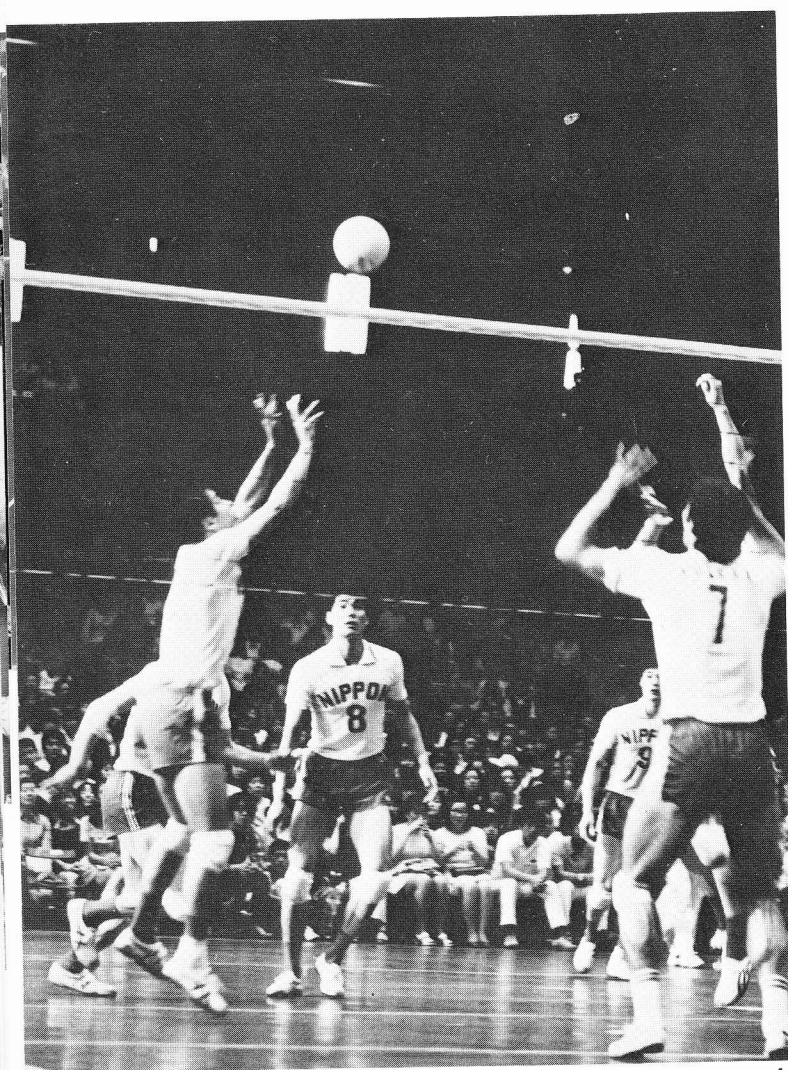


An attack in front of the B-quick. A twisting spike by Oko. (He spikes with an arm action opposite to the body's direction.)

A double B-attack.  
Shimaoka sets. Oko and Morita jump at the same time.  
Oko jumps in front of Morita.





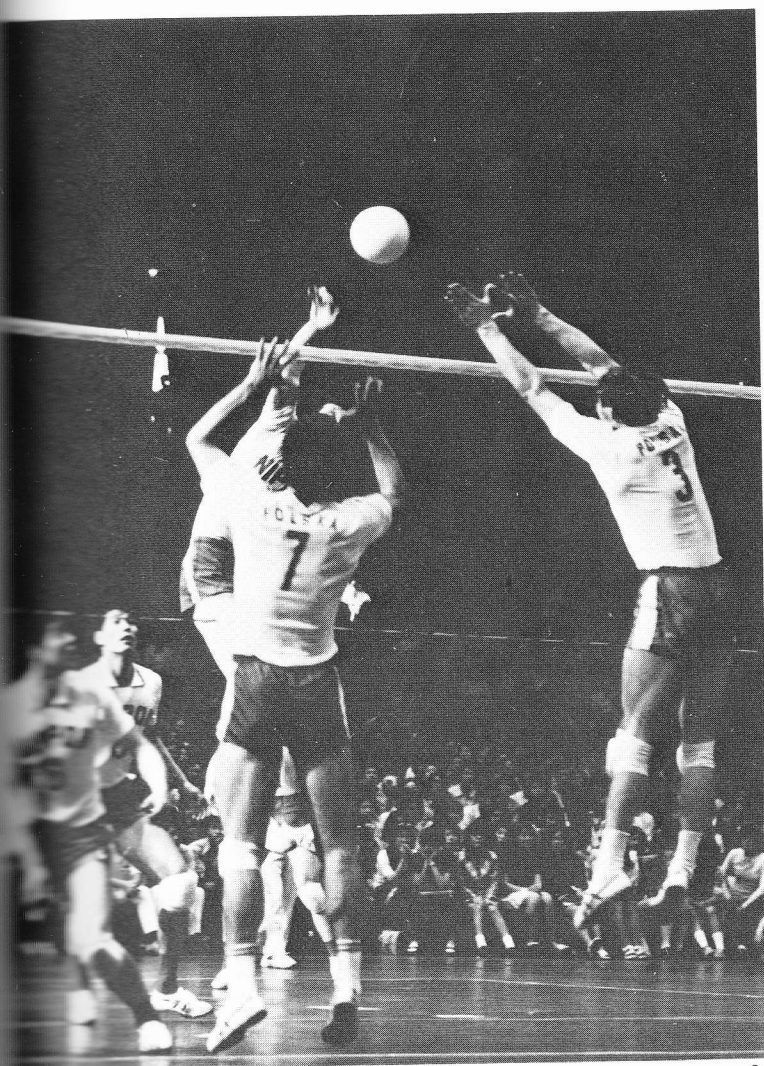


opposing court cannot anticipate which is the faker and which is the hitter. This technique should be called a place differential attack rather than a time differential attack.

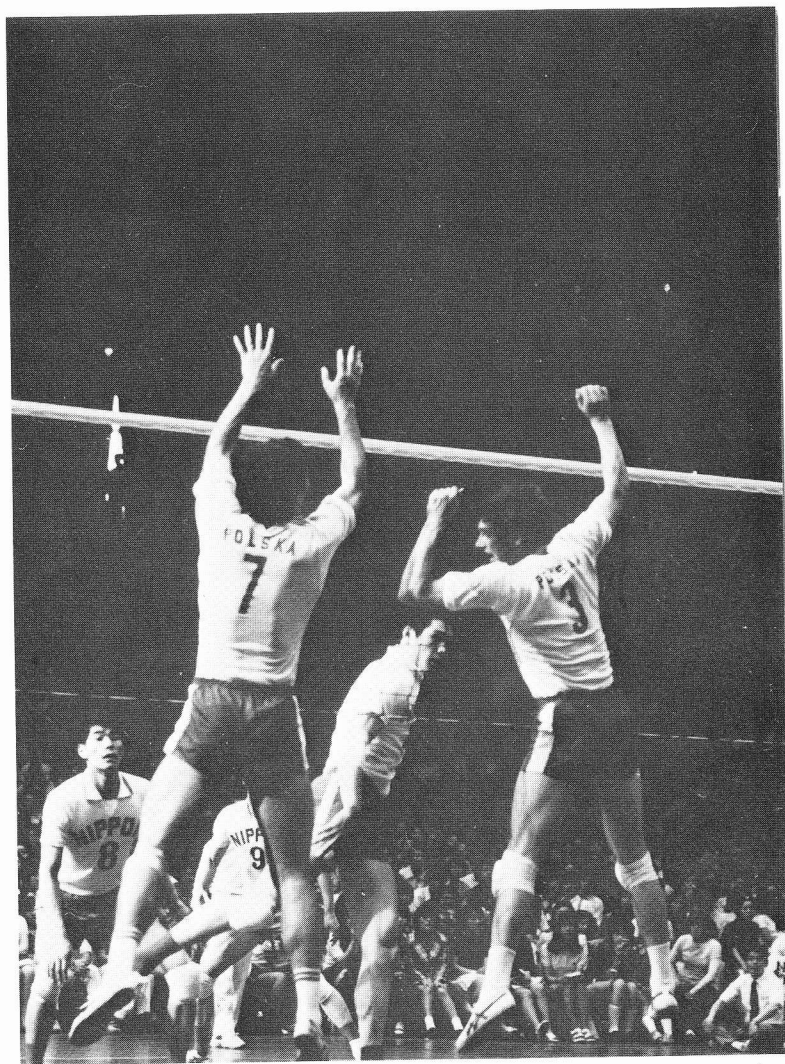
4. A 'Z'-attack which is more complicated than a double 'B' attack. When the ball is passed to the setter, Kimura and Fukao fake the blockers with a double 'B' attack jump. As soon as Nekoda sees that the blockers are faked by Kimura and Fukao, he sets backward almost one metre. Meanwhile Oko comes in to the setter with the timing of a 'C'-quick attack and suddenly turns his direction to the right side and hits the back set from Nekoda twisting his body to the right side of the opponents court, hitting on the sharp cross court angle. Because the approach of Oko and the travel of the ball after his spiking make a letter "Z", we call this the Z attack. This is very complicated and requires great technique, needing two or three faking plays to achieve the attack.

New time differential attacks have been developed in addition to these four techniques.





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Basic Pattern, (An attack in front of B. A twisting spike by Oko) time differential attack.

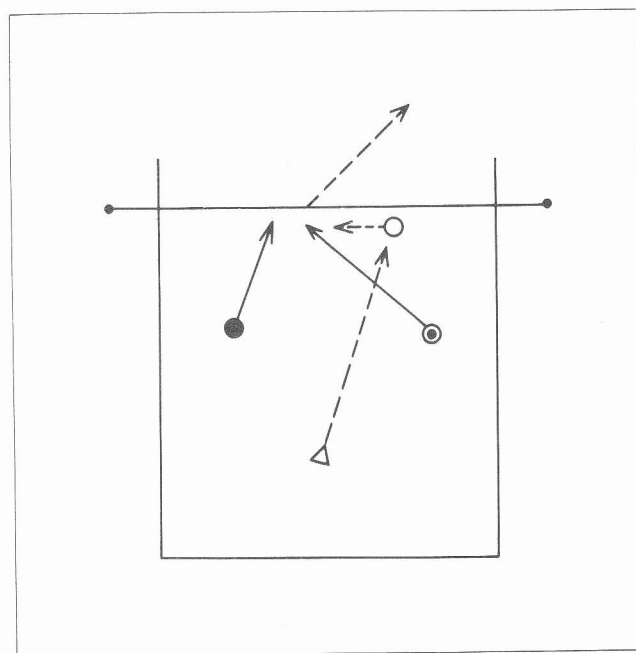
- (1) Shimaoka sets, while Oko, who stay behind him, runs in,
- (2) Fukao jumps to fake with the timing of an A-quick attack, while Oko starts to jump behind Fukao,
- (3) Oko spikes in the opposite direction to the direction he runs in, after twisting his body in the air,
- (4) The blockers are split.



(1) As soon as the ball is sent to Shimaoka, Oko (No. 10), Kimura (No. 5), and Fukao (No. 6) start to approach at the same time.

- (2) Kimura and Fukao jump to fake with the timing of a double B attack, while Oko turns his approach just before Shimaoka and runs in behind him.
- (3) Shimaoka sets back,
- (4) Oko jumps,
- (5) Oko spikes on the cross court at the right side.

A twisting attack (an attack in front of the B-quick attack).



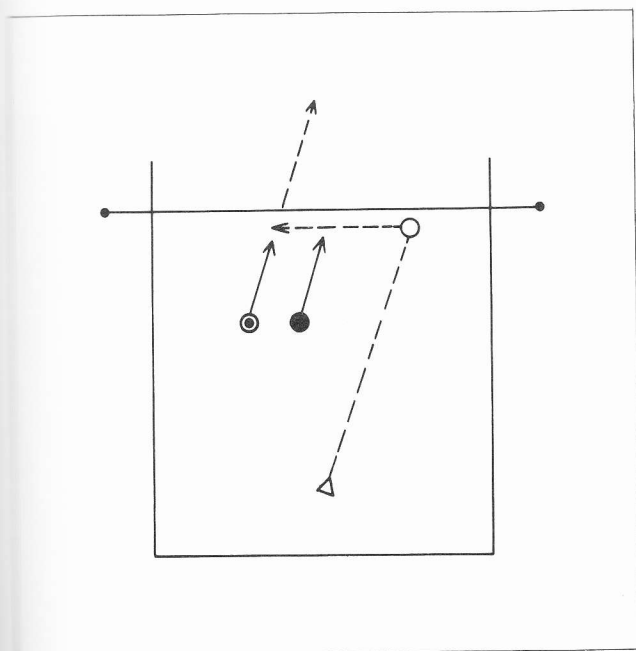


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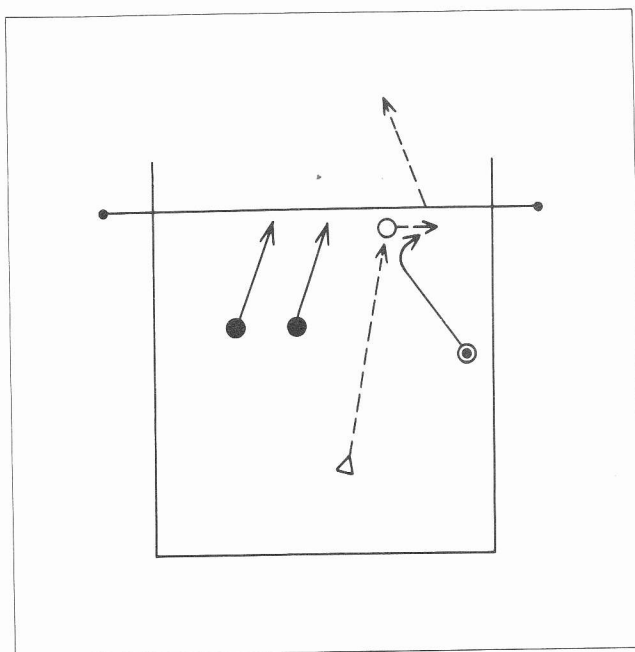


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A double B-quick attack.



A Z-attack





### **A One-Man Time Differential Attack:**

This is the most effective trick tactic of all and is completely done by only one player. Therefore this tactic requires more skillful technique. Morita, Kimura and Nakamura do it well.

When the ball is passed to Nekoda, Morita comes to him and jumps slightly using the timing on an 'A'-quick attack. The blocker is faked and jumps just after Morita does. Meanwhile, Morita lands on the floor and jumps again with all his strength, hitting a semi-quick set after the blocker has landed.

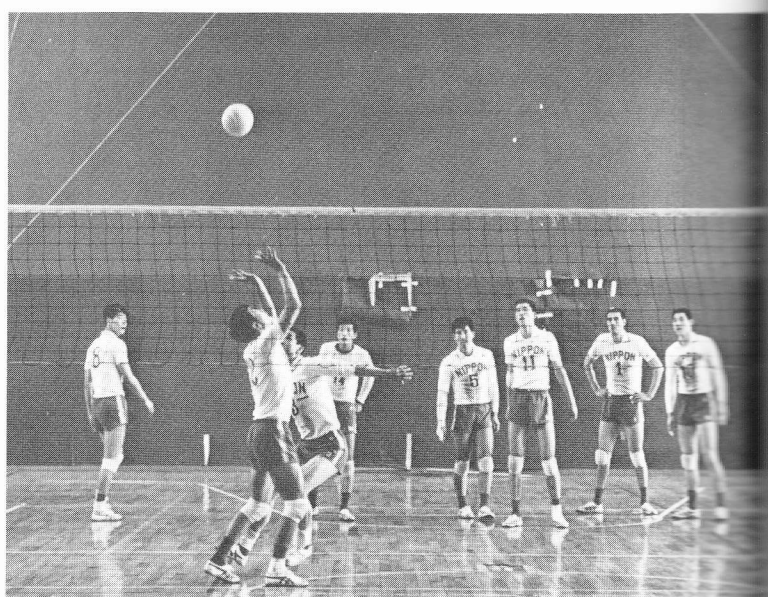
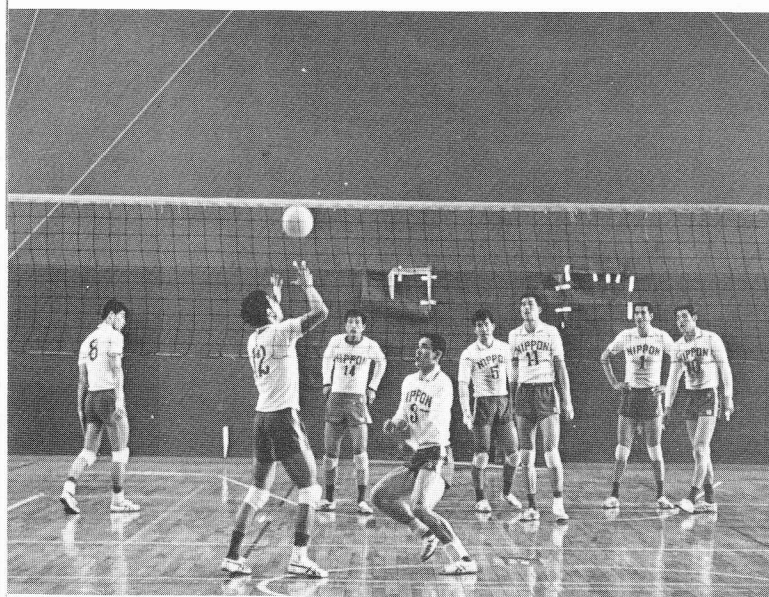
When blocking against an 'A'-quick attack of a 'B'-quick attack, the blocker cannot be in time for it if he makes a momentary hesitation. Therefore, the blocker should always concentrate on the spiker's movement and action. He jumps to block as a result of his anticipation that an 'A'-quick or a 'B'-quick attack will be done in certain situations. It is quite natural for him to be faked and to jump without any hesitation, when Morita jumps slightly with the timing of an 'A'-quick attack. This technique makes very good use of the blind spot in the mental and physical movement of blockers. The basic pattern of a one man time differential attack is done in front of Nekoda. This may also be used when he sets backwards. Morita comes to the front of him with the timing of an 'A'-quick attack and then suddenly turns to the right side behind Nekoda and a slight jump. He then hits a back set.

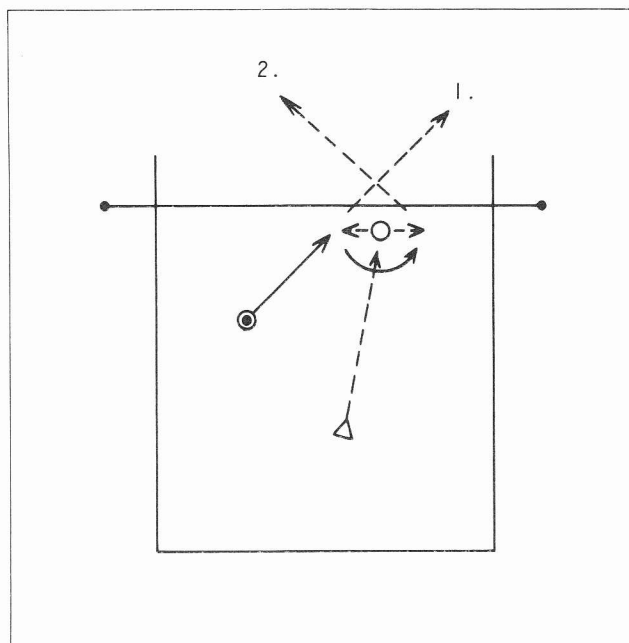
### **Morita, The Fastest Spiker in the World**

Jungo Morita as well as Kimura, has created new weapons one after another; a snatch spike, 'B' and 'C' quick attacks, one-man time differential attack, etc.

Morita came to the National team in 1966, when he entered the Nippon Physical Education University, after graduating from Nichidai-Tsurugaoka High School. Though he attended the World Championships this year for the first time, he was one of the bench warmers. However, in the autumn of this year, he played very well as one of the starting members in the Asian Games. At that time, he was regarded as a hope of the National team. Since then, he has improved mentally and technically to become a star of volleyball. Yokota and Oko who are the same height as Morita at 1.94 metres are cannons of our team, but Morita is a machine gun. I found that he could play and move more quickly than Yokota and Oko and therefore decided that he should be a machine gun. I have trained him very hard. He is a larger sized machine gun than any other player in the world.

Now we have the Number 1 machine gun in the world, who is very good at quick attacks, blocking and lightning fast serves. He can spike high sets made from the back row, though he could not do this before. I think he is a genius in volleyball. With his talent he had made great efforts to improve his skills and techniques in order to be the number 1 middle player in the world.

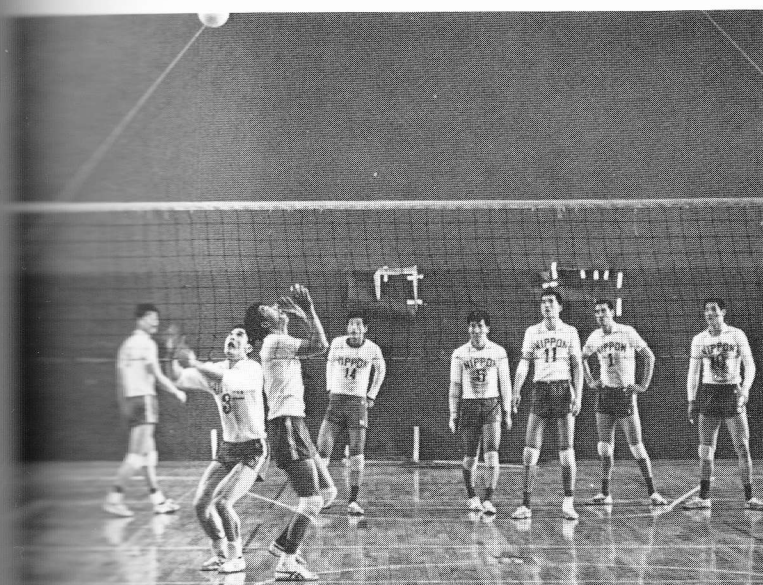




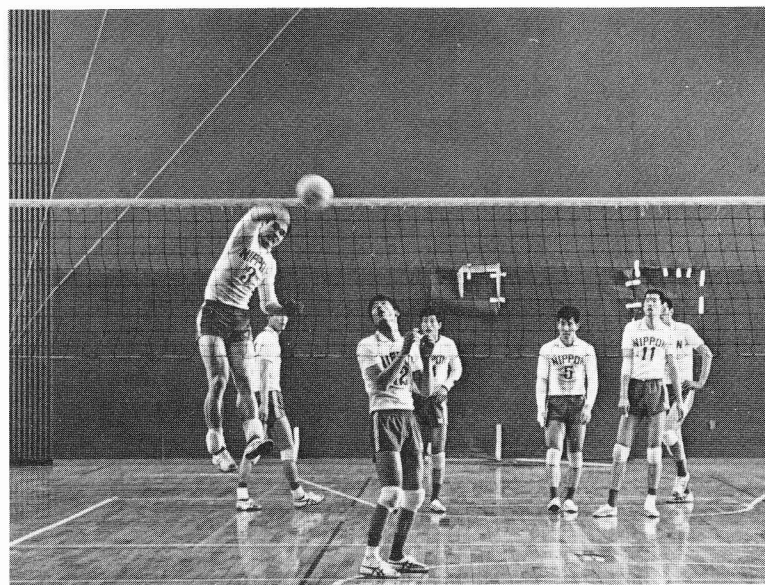
A one-man time differential attack.

#### A one-man time differential attack.

- (1) When the ball is sent to Shimaoka, Nakamura runs in and takes a ready position for an A-quick attack.
- (2) Shimaoka sets backward.
- (3) Nakamura runs in behind him and jumps,
- (4) He spikes.

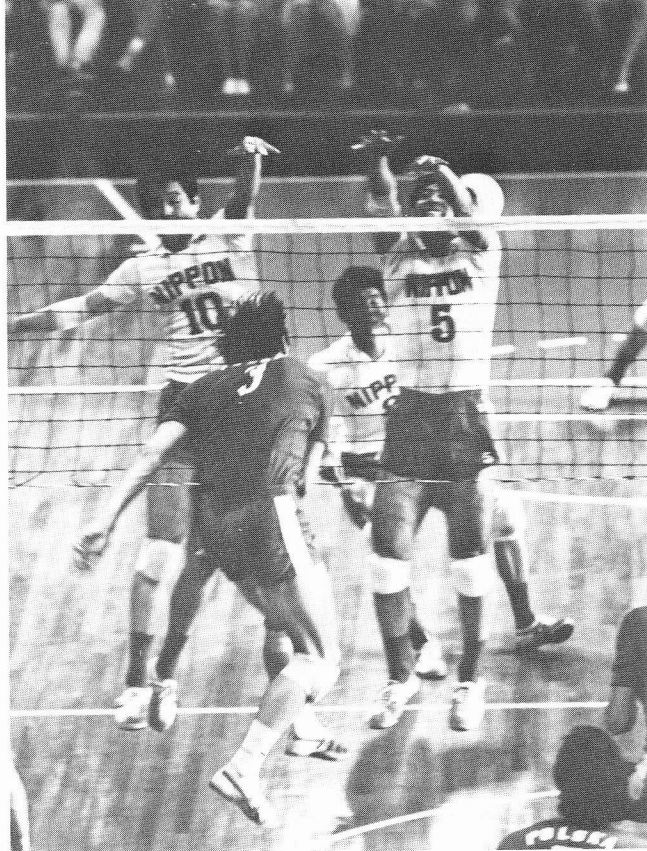


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A-quick attack by Bebel (No. 3) of Poland.



A time differential attack by Putijatov and Starunski of the Soviet Union.



### Machine Guns of the World

Frankly speaking, no one is more skillful or powerful as a middle player than Morita, though the trend of tactics with speed has actually created more specialists for quick attacks than before.

There were quite a few in the world who could play an 'A'-quick attack, up until the Mexico Olympic Games. In the last two or three years 'A'-quick spikers have rapidly increased in the world. These include Ptijatov, Starlnski, and Borsh of the Soviet Union, Maune and Beize of D.D.R., Stancho, Pipa and Fiara of Czechoslovakia, Bebel and Garvas of Poland, Zlatanov and Torenev of Burgaria, and so on. Recently some of the 'A'-quick spikers have come out in the middle group teams such as Brazil, Italy and Finland. They have tried to import the Japanese style of volleyball.

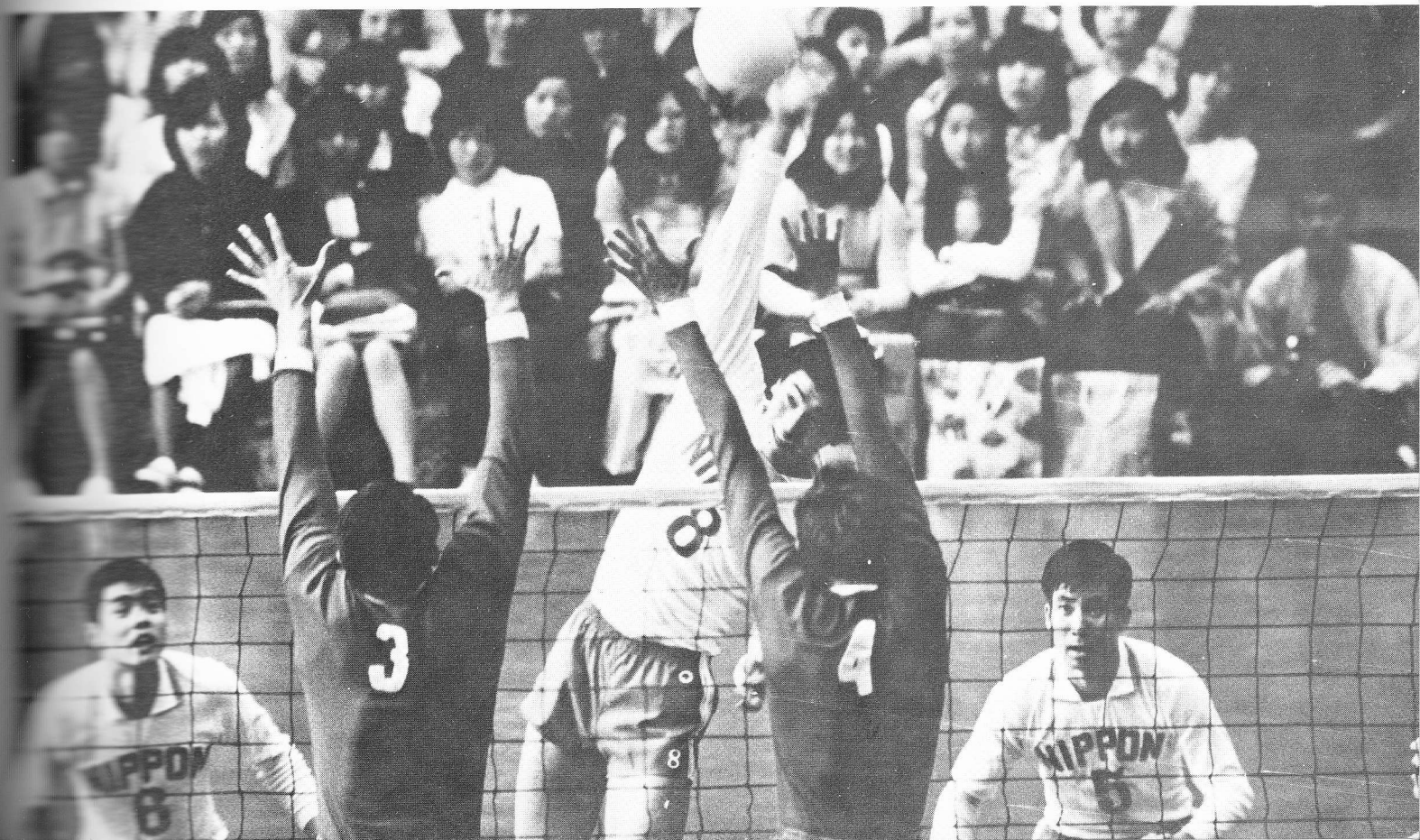
In foreign countries there are much less 'B'-quick spikers than 'A'-quick spikers. There are only one or two players such as Zlatanov and Borsh. Zlatanov runs to the net two or three steps and waits for a 'B'-quick set from Karlov the setter, he then spikes sharply. He is more powerful than Borsh. Until the World Championships of 1970, no one could play a 'B'-quick attack in the foreign countries, but the players like Zlatanov have begun to come on in the last two years.

These foreign players can usually only play the 'A' and 'B' quick attacks. They are not very good at other techniques of attacking. On the contrary, players like Morita, Kimura, Fukao, Nishimoto and Shimaoka can play all the techniques of attacking,



besides 'A' and 'B'-quick attacks. The machine guns  
of Japan are much better than those of foreign  
countries.

Spiking by Morita in the centre.



## Middle Players

Morita is the most valuable of all the middle players of the world. A middle player always plays in the front centre when he is in the front row. His main jobs are:

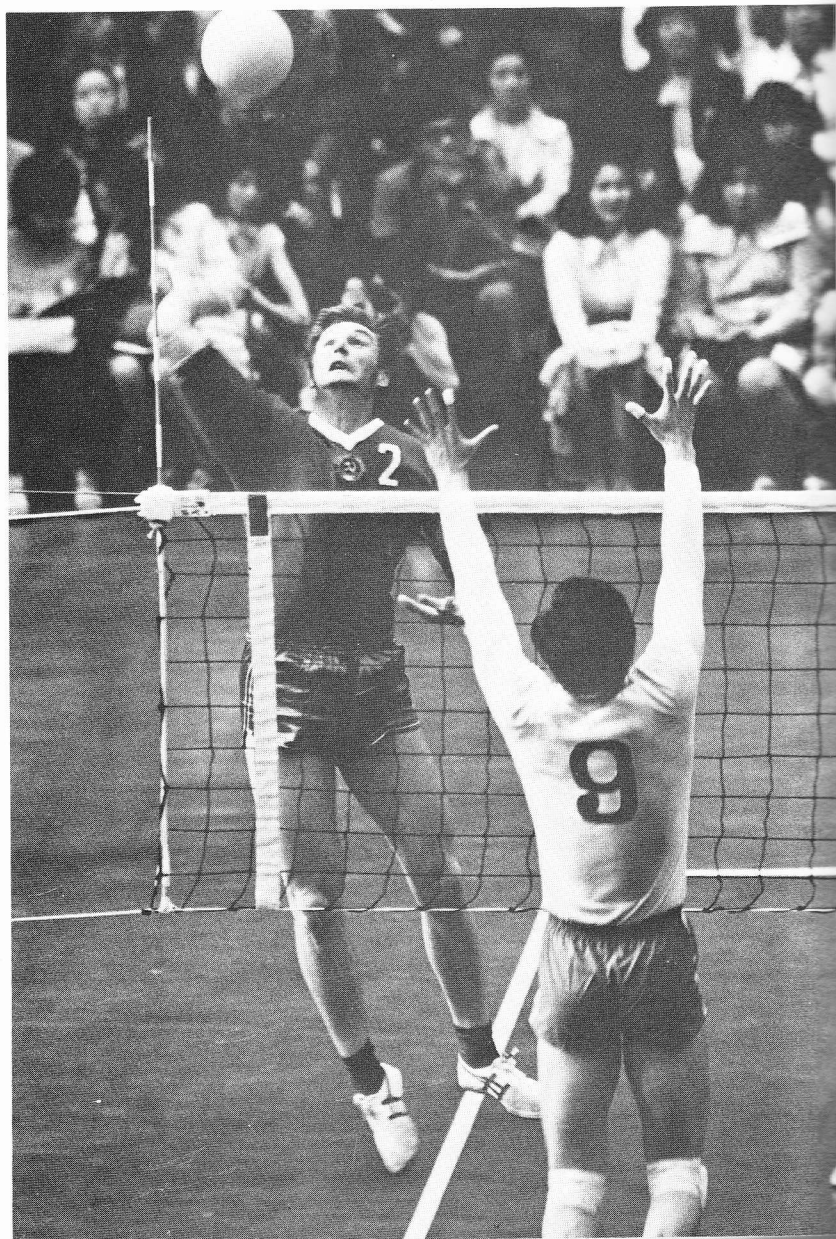
1. To be the core of quick attacks,
2. To be the core of blocking,
3. To deal with all the difficult balls around him.

It is quite natural that the middle player should be a core of the quick attack, as they are usually done close to the net. It is also natural that the middle player should be the core to blocking. I will speak about blocking later. When the receivers receive the opponents spikes (dig), the ball often travels to the middle player or around him so that he must be very good at dealing with the difficult ball, fast or slow, high or low. He must frequently deal with the ball which is not intentionally sent to him by the receiver. Even when he cannot take a ready

position well enough to deal with the ball just after his blocking, he must precisely deal with it according to the situation. He must spike when he decides he should do so and he must set when he decides that he should do so. Therefore the middle player is required to have decisiveness and quick movement.

Morita has enough ability and technique to be a middle player. He is very good at a second hit attack, a wipe-off, a tip attack and setting. His jobs are very important and successful on the national team. Even when we cannot help giving a free ball to the opponent, we can attack if he is on the centre front. Even if it is not effective, we can easily get a free ball from the opponent. There are good middle players in Europe; Kravchenko of the Soviet Union, Petlak of Czechoslovakia and so on. Morita is much better than they are. He is a major contributor to the National team.

Spiking by Kravchenko of the Soviet Union, in the right front.





Spiking by Petlak (No. 14) of Czechoslovakia.

### **The Significance of Plays to Assist Others**

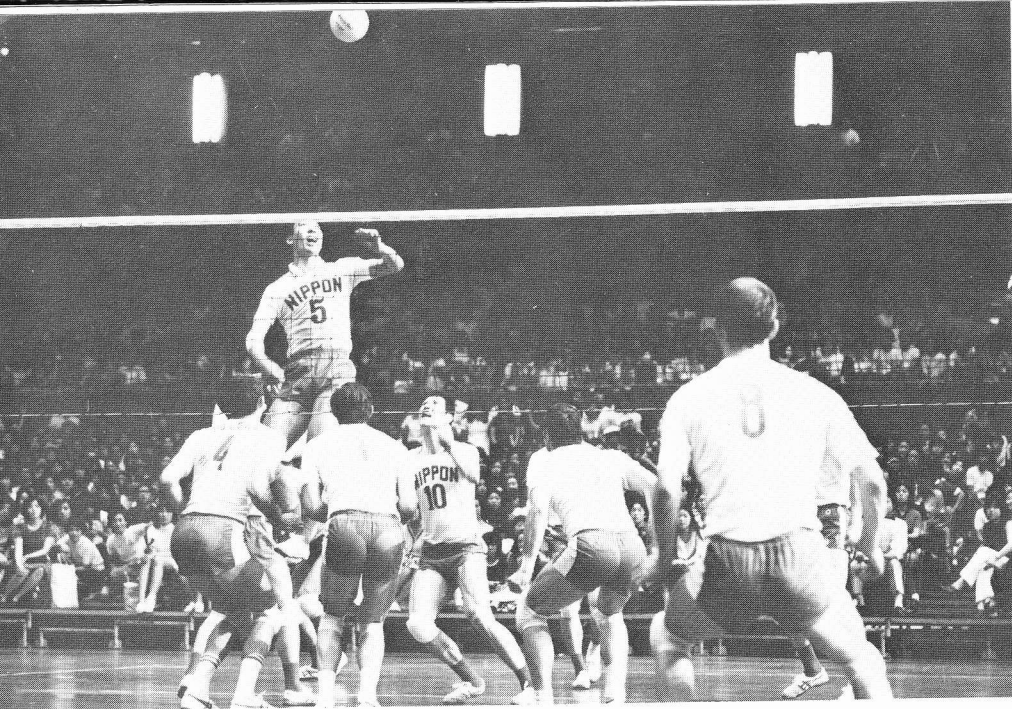
Every player should realize how significant it is to assist others. There is no reason for being on the team if he doesn't do his best to assist others in the matches.

Suppose that no one fakes the blocker with an 'A'-quick attack jump, then a time differential attack cannot be successful. It is possible only when a player jumps with all his might to fake the blocker. In this case he assists a spiker successfully. Though he does nothing but jump, it is not useless, but significant. If he does not jump to fake the blocker, his teammate is miserably shut out by the blocker.

Actually, a quick spiker can hit the ball only two or three times out of ten jumps. Seven or eight jumps are done to assist another spiker. The spiker who recognizes the significance of plays to assist others always jumps as if he intends to spike and fakes the blocker. A time differential attack is therefore successful. In the case of an open attack, the outside spiker can spike successfully when there is some one who jumps to fake the blocker. His jumping makes the blocker ineffectual against the outside blocker.

The Czechoslovakian players, who think much of individual skill, might say, "It shows a poor level of individual skill when a spiker cannot hit the ball successfully if someone doesn't assist him". The players of the Soviet Union think that we don't need any assistance, because we can successfully spike with great force. However, the players of Japan think that we need to assist each other in order to achieve the purpose of the team. In other words, we are dedicated to sacrifice ourselves to assist others. This is the traditional thinking way of the Japanese. A time differential attack is based on that.

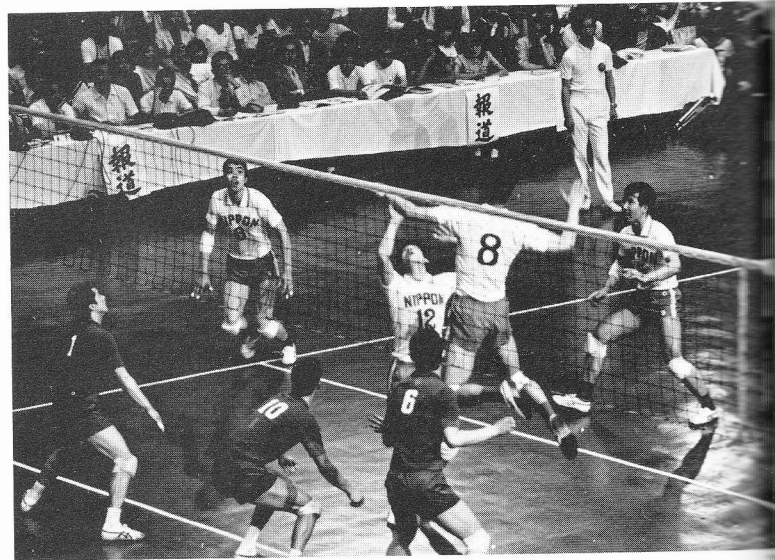




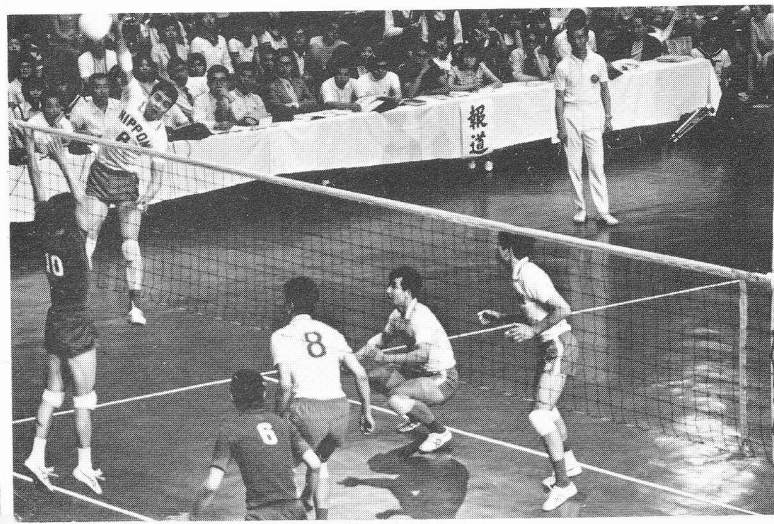
Kimura jumps to fake and help Oko who spikes him, yelling so loudly that the blockers may pay attention to him.



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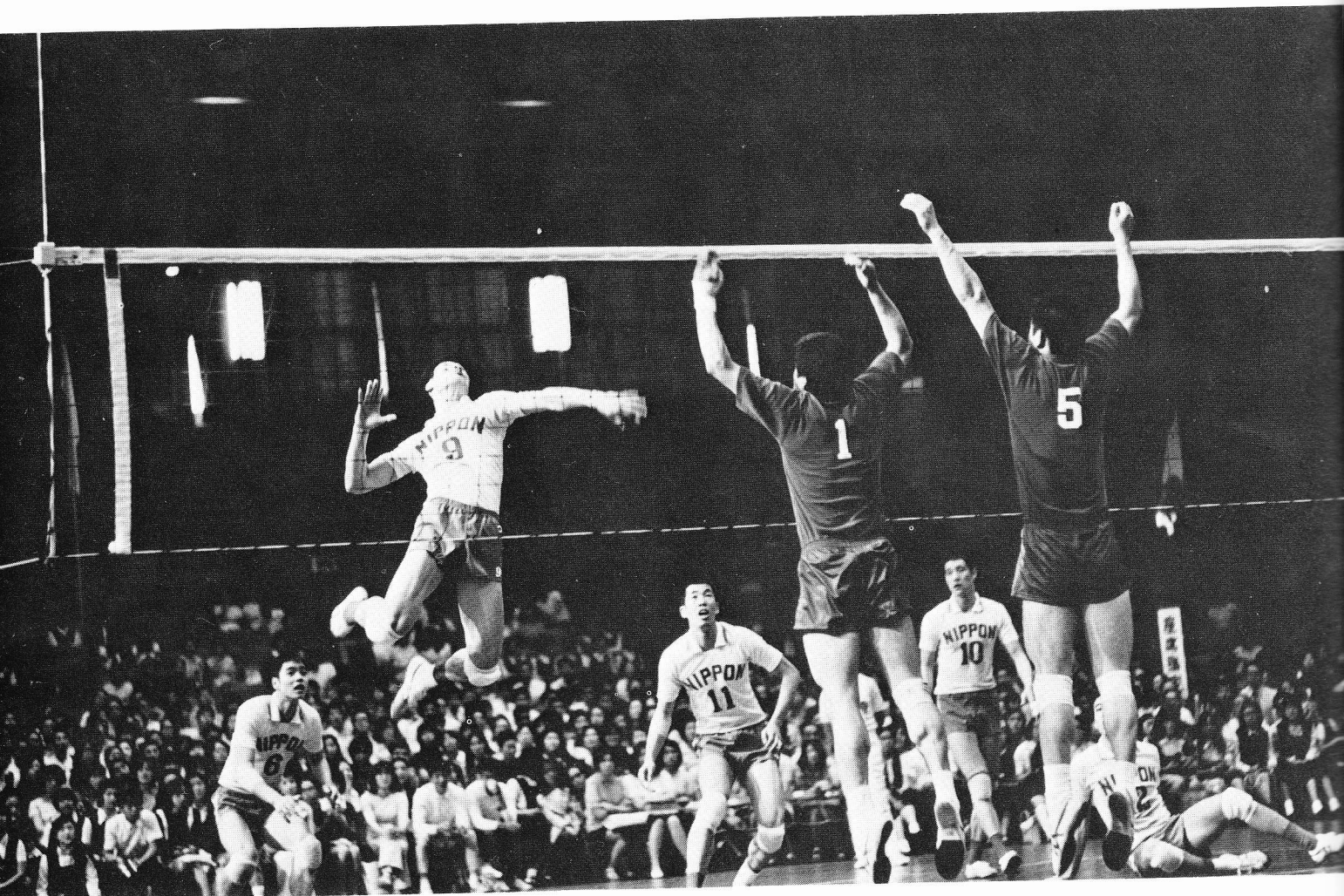


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The significance of helping others.

- ① The ball is sent to Shimaoka,
- ② Morita (No. 8) jumps to fake the blockers,
- ③ The back set is sent to Fukao (No. 6) who waits for it at the right,
- ④ Fukao spikes,
- ⑤ The blockers cannot block perfectly because they are faked.





The open spike in the right by Morita.

### An Open Attack

A quick attack is done at the middle of the court close to the net and an open attack is made at both sides of the court. The cannons of the team mainly spike a high set outside the court.

The open attack has been regarded as a fundamental technique of attack. Spiking a high set to both sides and a vertical set to the middle has been used often since early days. Today, as a quick attack is very common, the open attack is also called a slow attack. As volleyball has become faster, a lower set and a quick set (shoot set) to the sides are used for an open attack, instead of a high set.

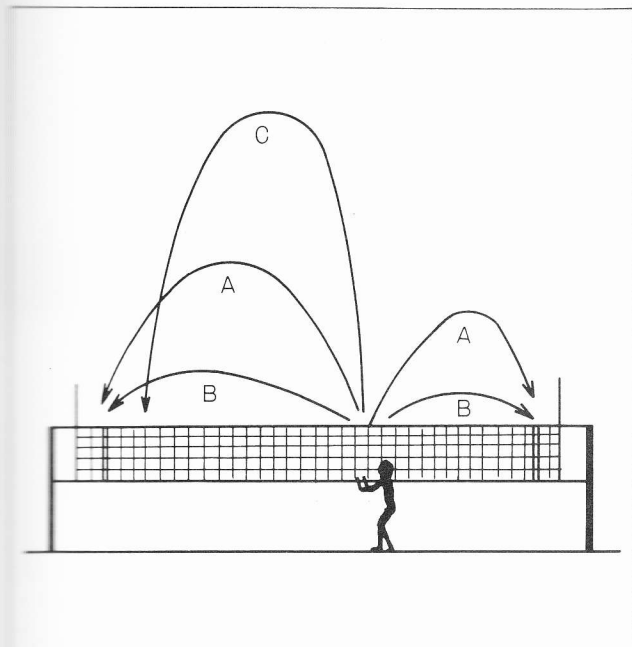
Recently, most attacks have been made at the middle front so that the blockers usually stay at the middle or close to the middle front. The open attackers can spike if they get quicker sets from the setter when the blockers are not in a ready position. If a high set is sent to the open spikers, the blockers can easily move from the middle front to the sides and take a ready position for blocking completely. Therefore the sets to the open spikers have been

getting more speedy in all the countries. Out of all of these, Nekoda has the fastest sets. When Kimura is a spiker at the front right, Nekoda sets with the same speed as a 'B'-quick set. Even Nekoda sets with the same speed as a 'B'-quick set. Even Yokota, Oko and Saito, cannons of Japan can hit the quick sets (shoot sets) at the front left.

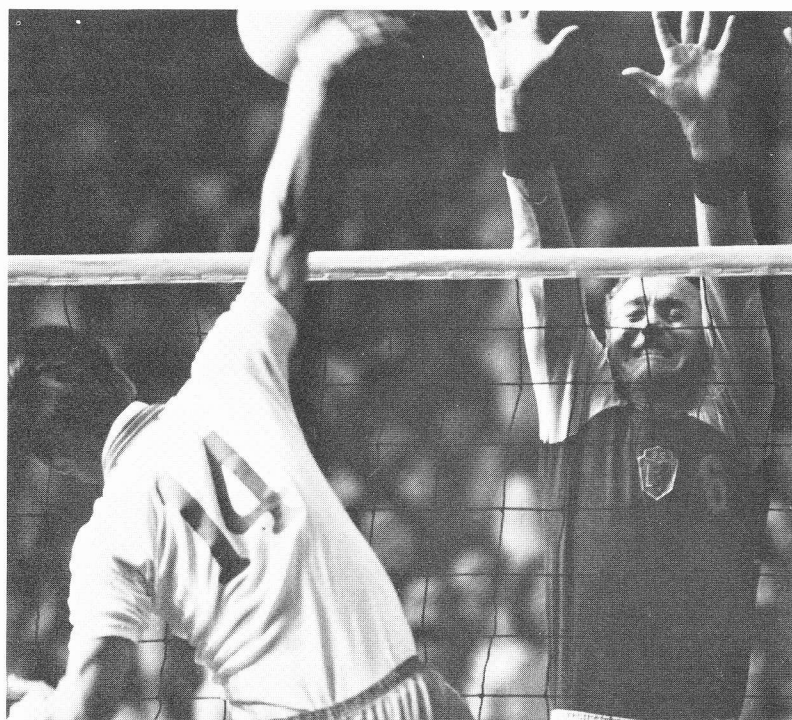
However it is not always good to set with speed to the outside (open) spikers. It is necessary to alternate a shoot set and a high set, because alternating sets makes the blockers out of order in their timing and the defense mad with its rhythm. Which set is best in a given situation depends on the setter's anticipation and decisiveness. Nekoda always shows excellent perception, anticipation and decisiveness when he is setting.



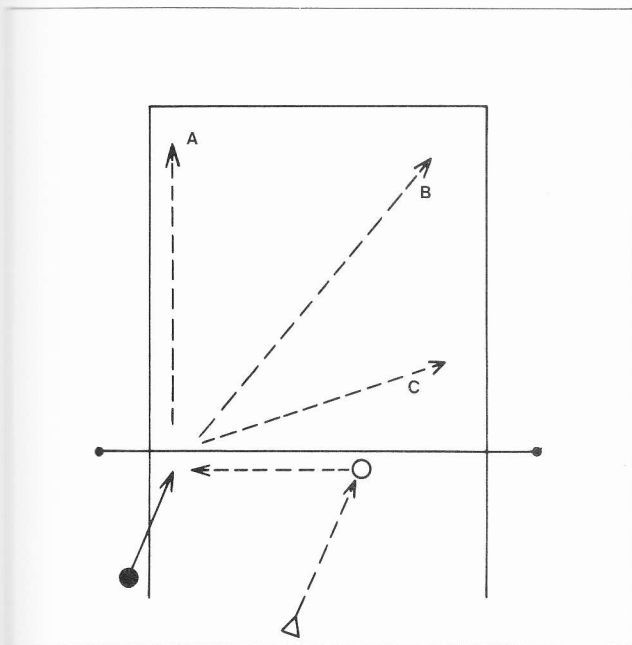
The open sets.



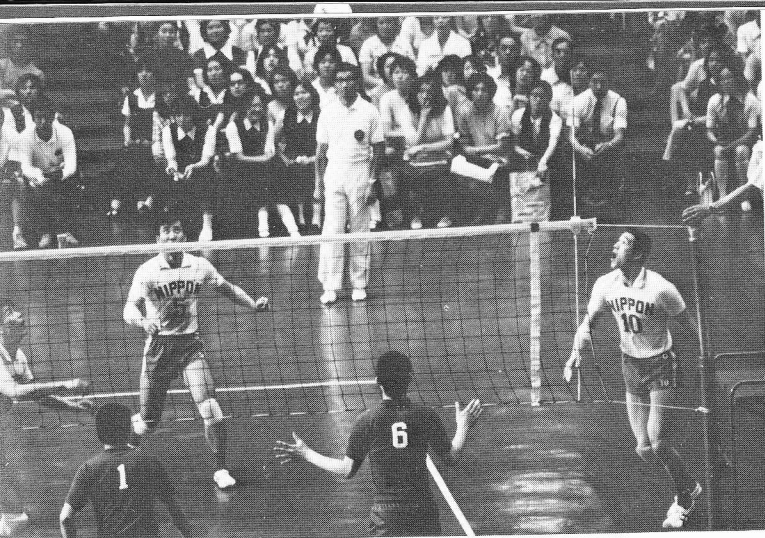
- A The open sets (very popular)
- B The shoot set (getting popular)
- C The high set (D.D.R. is good at this)



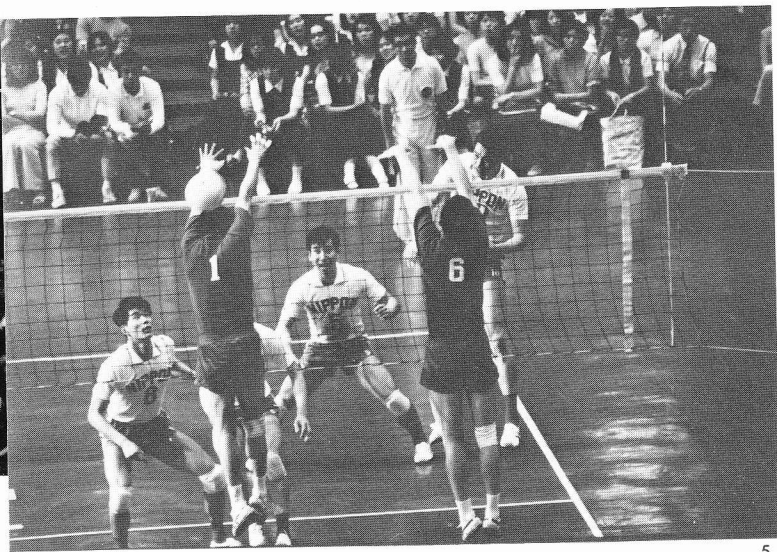
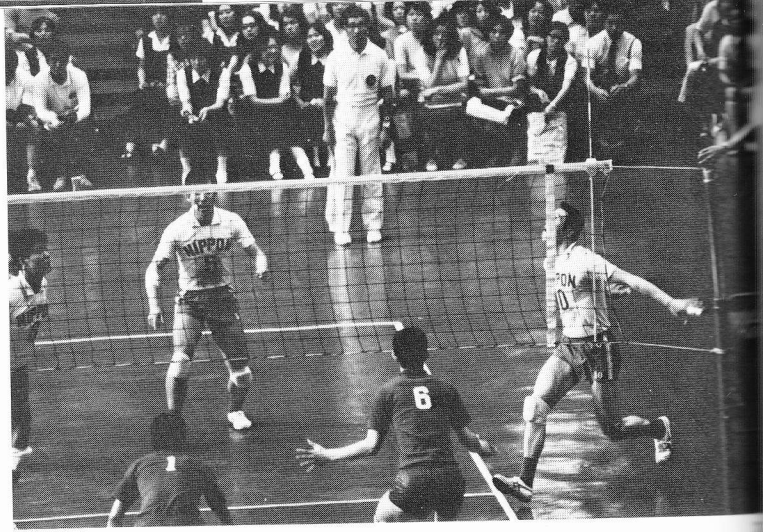
Noguchi is spiking on the line, the D.D.R. blockers cannot stop the spike, as he hits boldly, facing the net.



- A The line spike
- B The cross court spike
- C The sharp (shallow) cross court spike.



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The open spike with the left by Oko. He always looks at the ball and spikes with a snappy body movement. He aims for the split between the blockers.



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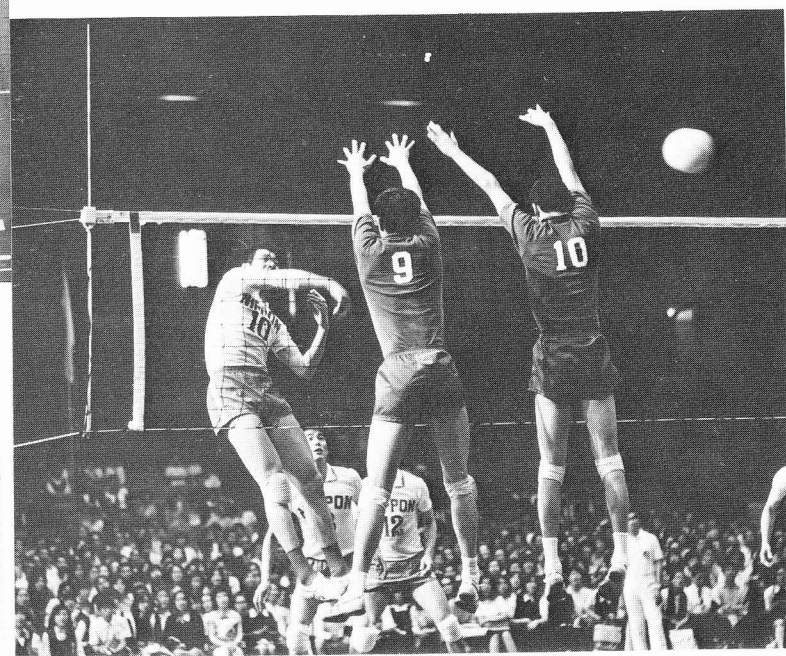
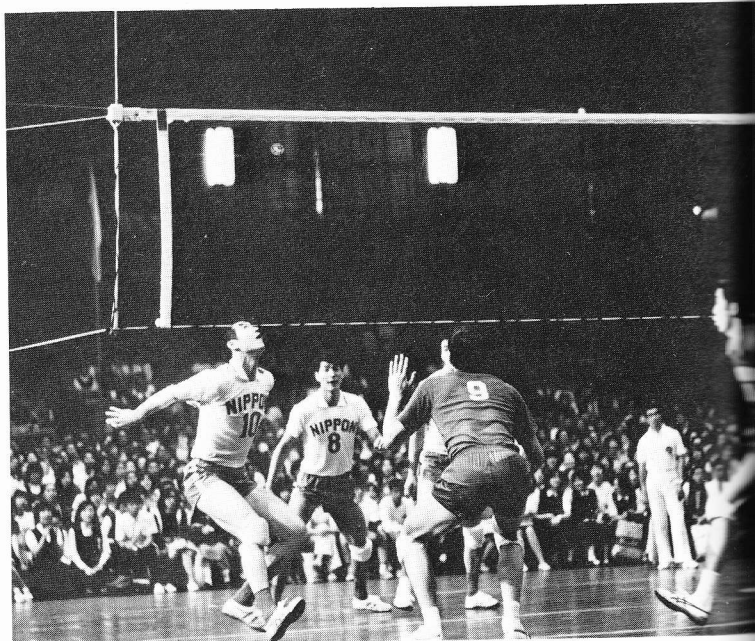
The open spike at the right by Kimura. He is spiking on the line, twisting his body in the air, with a motion as though he intends to spike on the cross court.







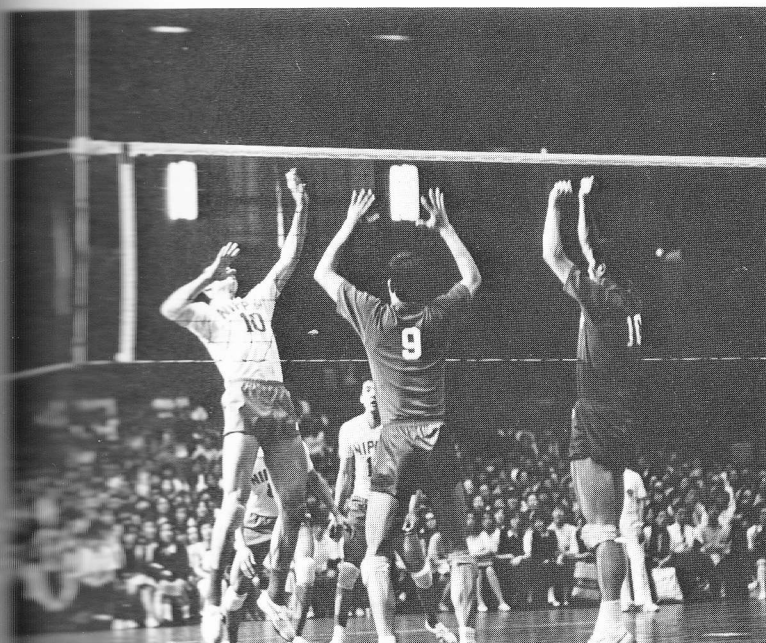
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The open spike at the right by Oko.

- (1) He approaches, looking at the ball
- (2) He sinks his body, bending the knees,
- (3) His take off,
- (4) He bends his body backward and swings his arm backward,
- (5) At the moment of contact he twists his shoulder and arm to the inside and hits the ball to the shallow cross court.



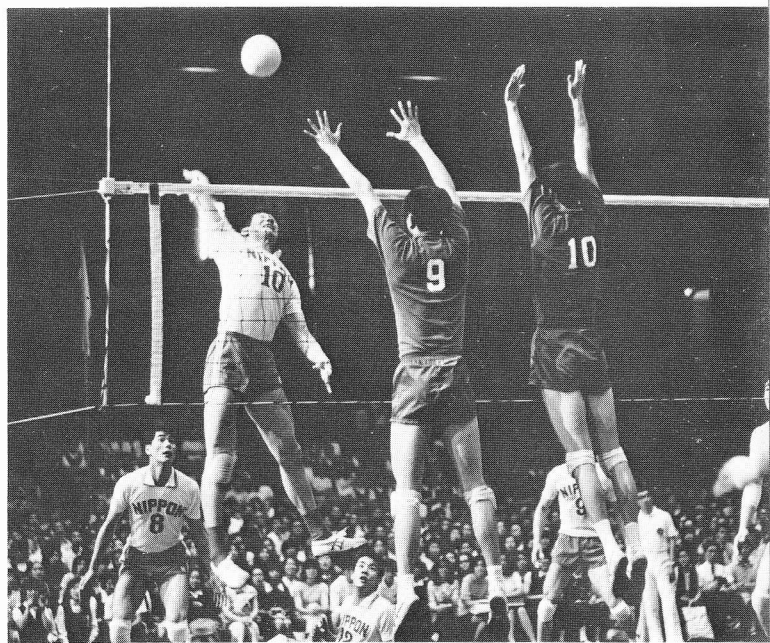
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### Spiking Sets That Come From Behind the Spiker (A Two-Step Attack)

When the service reception is so bad that the ball cannot be sent to the setter, the other players set to the outside spikers from behind them.

Usually an attack consists of three steps; a pass, a set and a spike. When the Opponent's spike or serve is so strong that the receivers cannot pass the ball to the setter, the attack is obliged to be done with only two steps; a pass of a set, and a spike. In this case a pass (or set) is done mostly by the players, excluding the setter. We call **an attack spiking a set from behind the spiker a two step attack**. This means that we have only two hits for an attack, so we cannot try a quick attack. We are obliged to make an open attack with a high set from behind.

The spiker can easily hit the high or shoot set from the setter, because the ball is travelling parallel to the net. On the other hand, it is very hard for the spiker to hit the set from behind him. Sometimes he cannot even anticipate the direction which the ball is coming from, according to the defense situation. Sometimes the setter or another player sets to him, rolling on the court. This is easier for him to spike than the ball sent from behind the endline or from some place behind him. In order to spike the set, he has to face the direction which the ball is coming from and take a ready position to get good timing. He spikes with power after he swings his hand, with a snappy body action in the air. If he cannot do so, the free ball is sent to the opponent.



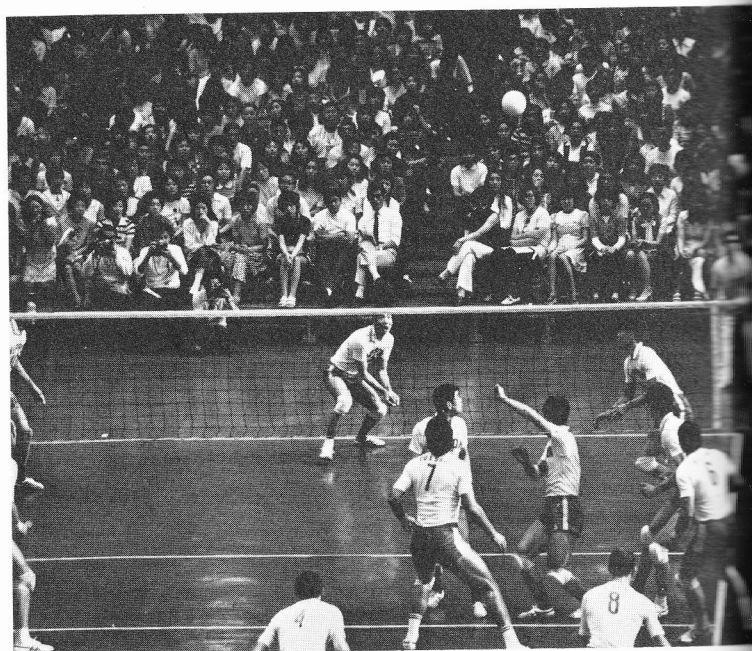
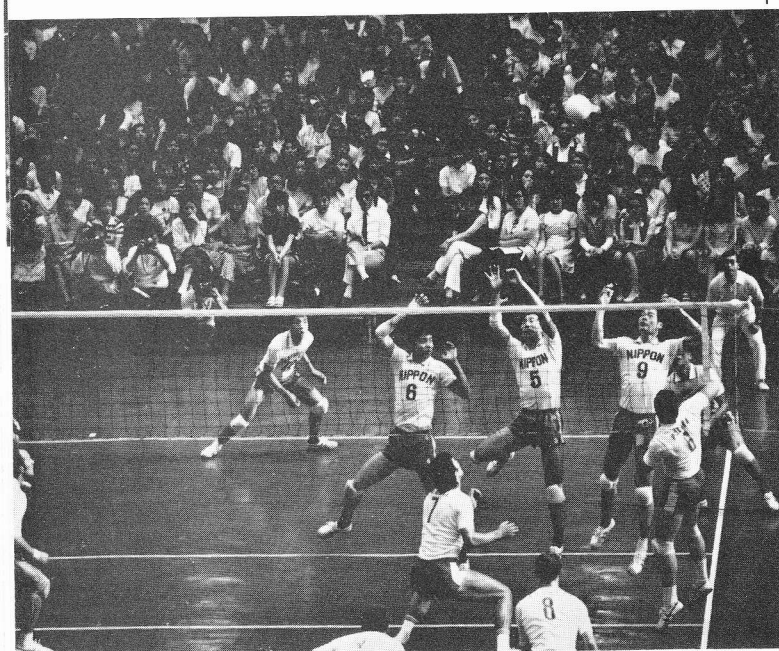
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The spikers who are called 'cannons' of the team must completely and successfully spike the ball coming from behind them. Yokota, Oko and Saito at the open sides, and Morita at the middle front should be called 'cannons' on the Japanese National team.





The two-steps attack, spiking the set from behind. Shimaoka sets the ball to the left front, falling down on the deep court. Morita spikes it on the line.







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The two-steps attack.

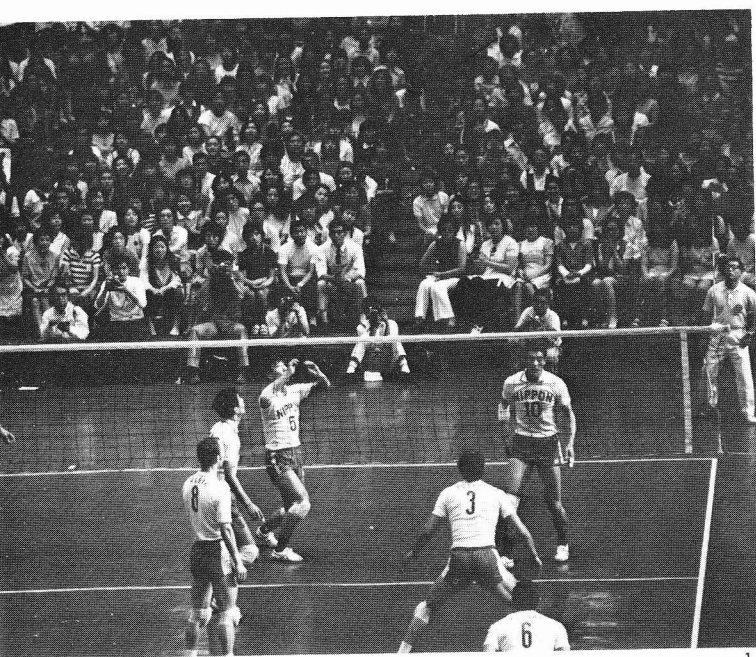
- (1) The Japanese blockers make the first touch of their hands on the ball spiked by Gaboski (No. 6) at the right front,
- (2) Shimaoka at the centre back sends the ball to the left front with a forearm pass,
- (3, 4) Yokota spikes it.



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### Okō With Horsepower

Avery Brundage, President of the I.O.C. was surprised at the sight of Okō and said, "He is like a big horse". He is a player with horsepower. He spikes with great force on a set from behind and shows beautiful and flexible body action when he is spiking.

Okō had worked for four years at the Toshiba Company after graduating from junior high school in the city of Kawasaki. He then moved to N.K.K. to play volleyball. He trained very hard and improved rapidly thanks to Demachi, the coach of the N.K.K. He joined the National team in the autumn of 1967, just before the tour to Europe. Since he had experience in the Mexical Olympic Games and other matches with top teams in the world, he has shown great improvement and become one of the top spikers in the world.

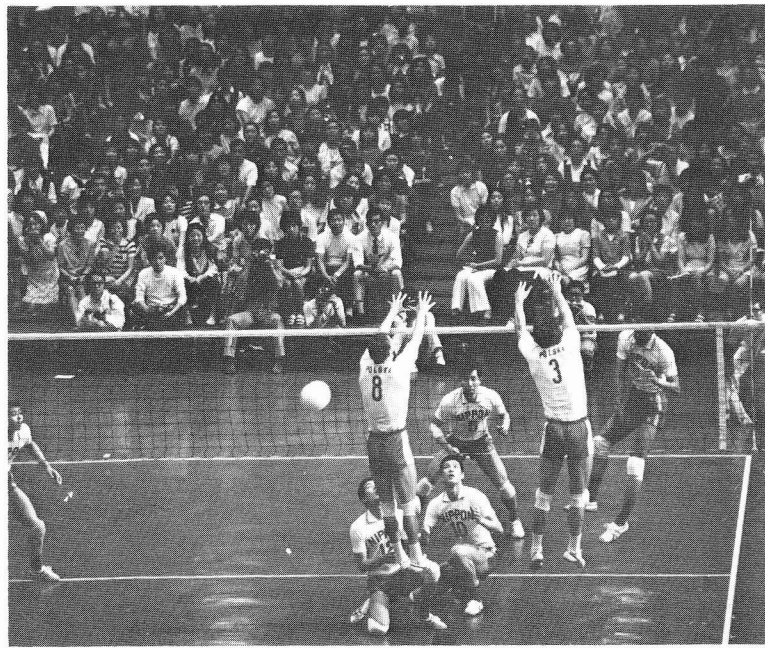
His unyielding spirit has brought him success through hard practice and training. He can successfully hit the set, 4 or 5 metres from the net, on the line. This shows his excellence for a 'cannon', who should be able to spike completely the high set from behind. When he gets the sets from the setter, he can effectively place his spike with power on the sharp cross court and on the line. He can spike a quick set so effectively that he also is able to do a main part of the combination attack, such as a time

differential attack. His abilities in spiking are wide-ranging. No one can imitate his placement techniques, the way he twists his body in the air. Okō, the best athlete in Japan provides reliability and hope to the National team.





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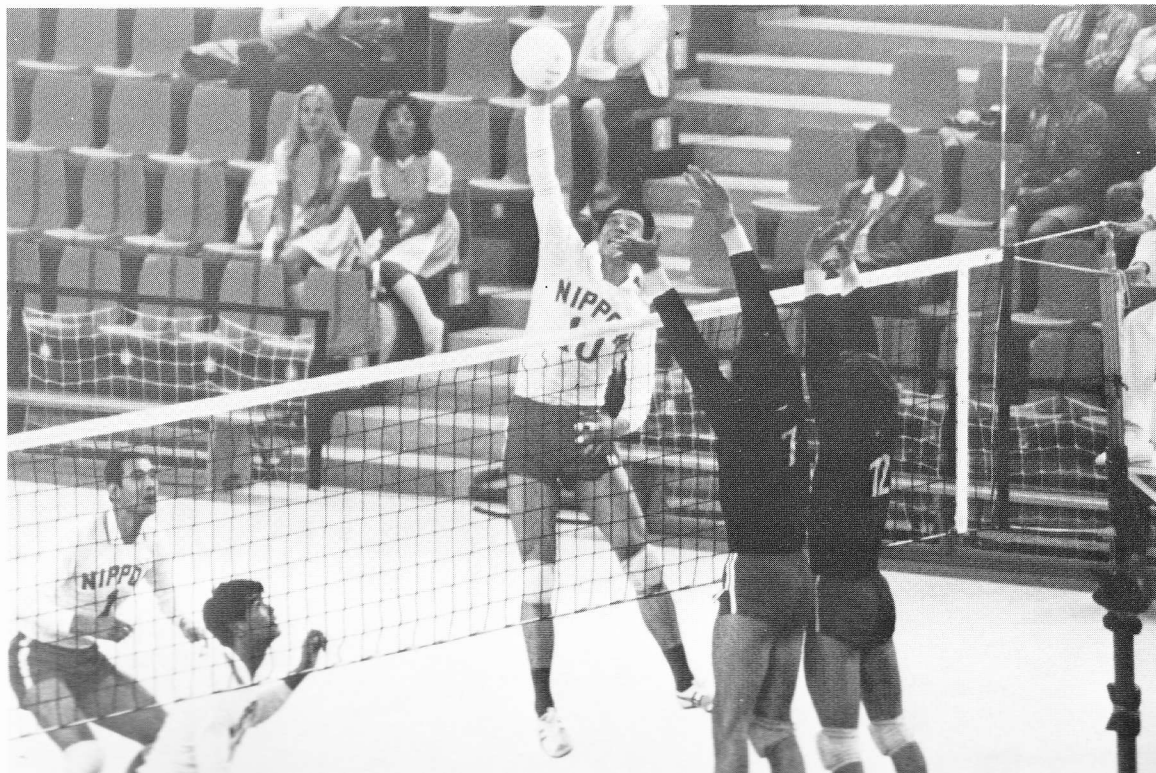
The two-steps attack.

① Kimura (No. 5) sets the ball in the middle of the court to the left front.

② ③ Morita jumps after approaching from the outside.

④ He spikes on the sharp cross court.

Oko at the Munich Olympic Games





### Yokota, a 'Cannon' with Arm Power

The spiking style of Tadayoshi Yokota is quite awkward. He spikes with a bolt upright style in the air, after his jump, and yet he can spike powerfully. He must have very powerful arms.

He came to the National team camp with Morita in March of 1966, just before he graduated from Tadotsu Technical High School. He was not selected for the National team for the World Championships in the autumn of 1966 but Morita

The open attack at the right by Yokota. His body keeps vertical after the spike and yet he can spike hard with power because he has very strong shoulder and arm.



was selected. Yokota was selected in December as a member of the National team for the Asian Games. During the Asian Games, Yokota was annoyed at being behind Morita and being the same age, and tried to practice harder and harder. In the International Tournament in Romania in 1967, he spikes extremely well and was given the award for the best spiker. There were many excellent spikers in the world; Sybilykov, Kravchenko and Bgaenkov of the Soviet Union; Schritze and Schneider of East Germany; and Pashkelitch of Poland. He developed self-confidence when he discovered that he could be ahead of them. He also contributed much to the team when we won the Silver medal in the Mexico Olympic Games.

Since then he has been much more consistent in his plays and is regarded as one of the best spikers in the world, along with Morita and Oko.

### **'Cannons' are Responsible for Getting Points**

In the 6-man system of volleyball, a point is awarded only to the team which is serving. Therefore, the serve is the most efficient means of getting points. It is however, very hard to get points with the serve only. Usually only one or two service points per game are scored when we play a team of the same calibre as ours. The purpose of most services is actually to make the opponent start to attack. Means of getting points include blocking and attacking the ball from the defense. In this case, the two steps attack (an attack spiking the set from behind the spiker), is very important in gaining points. Most points are awarded with the two step attack.

It is very hard to send the ball to the setter from the opponents attack. We are forced to send the ball with a deep set to the spiker. The spiker has to spike with power. Even if his spike is received by the opponent, we get a free ball next and then we can successfully make a three step attack to get a point.

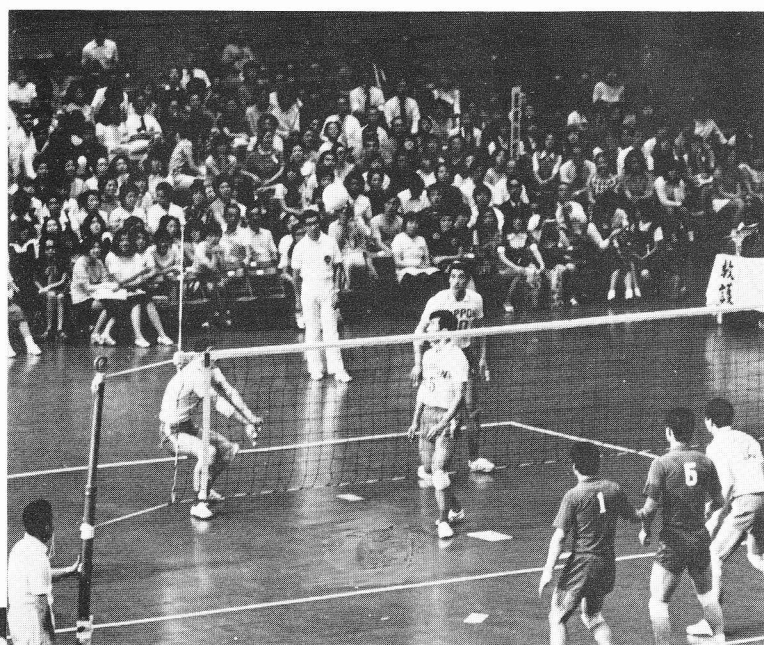
You can see how important a two-step attack is to get a point. In other words, you can see how important the spiker is who makes the two-step attack. He is a 'cannon' whose duty it is to get points. 'Cannons' also have to prevent us from losing points. In our service reception, a 'cannon' must spike the set from behind with power when we are unable to send the ball to the setter because of a hard serve. If his is successful in spiking we never lose points. Gaining or losing points depends on the 'cannons'. That is why I chose big players for the National team and tried to improve the 'cannons'.

### **A Back Row Attack**

Back row players may not direct a ball from within the attack area into the opponent's court, if the ball

is not below the height of the net. But they can attack from behind the attack line if their take-off for the attack was clearly behind the attack line. This is called a back row attack. This is often done when there is nothing to do without the back row players' attacking. For example, one of the receivers digs the opponents spike and the ball flies far away from the court. Another player catches up with the ball and sends it back to the court. The ball is flying back in the middle of the court. As the spikers at both sides in the front row don't have enough time to approach the ball to hit it, one of the back row players is compelled to spike from behind the attack line.

Most foreign teams use a back row attack in this case only, while in Japan a back row attack is often used for one of our tactics. The setter intentionally sets to the spiker in the back row and he hits the ball with great force. According to International Rules, the spiker can land on the floor within the attack area if the take-off for the attack is done behind the attack line. Therefore, the spiker in the back row can actually spike the set 1.5 or 2 metres from the net. Yokota and Oko who can successfully spike the deep set 2 or 3 metres from the net from behind, can easily do a back-row attack.



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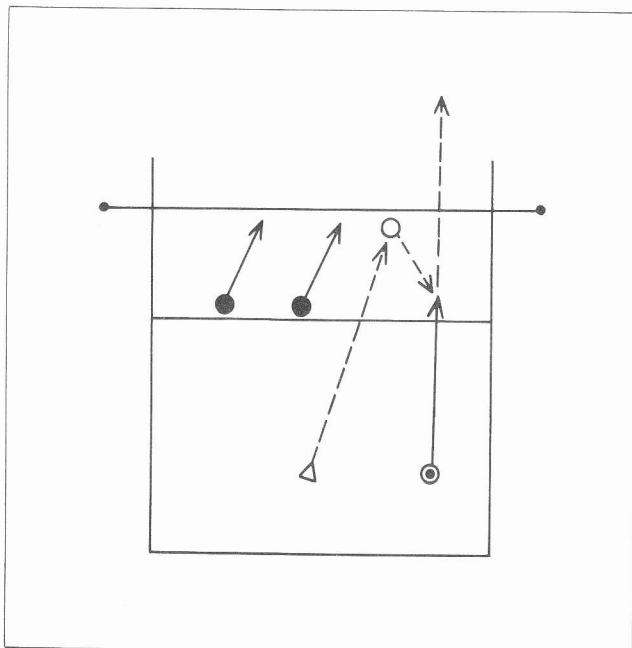
- (1) Fukao receives the serve and sends it to Shimaoka, setter.
- (2) Shimaoka sets it to the left, while Morita jumps to fake.
- (3) Oko who is in the back row sinks his body for a take-off at the attack line.
- (4, 5) Oko jumps.
- (6, 7) Oko spikes, twisting his body in the air to avoid the blocker.

## Tactics of a Back Row Attack

Suppose that Nekoda, Morita and Oko are in the front row. Morita takes his position in the middle, Nekoda by the right side of him and Oko at the left, just after we get a free ball or receive the opponents serve. The opposing blockers try to move to their right side. After seeing that they are taking a ready position for blocking against Morita and Oko, Nekoda sets behind 1.5 or 2 metres from the net. As the opposing blockers expect that no one in the front row is behind Nekoda, they try to move quickly to their left side, while Yokota in the back row spikes the back set from Nekoda successfully, after jumping behind the attack line.

In addition to this, there is another back row attack combined with a time differential attack. While Morita and Oko jump for 'A' and 'B'-quick attacks to fake the blockers, Nekoda sends the ball with the back semi-quick set to Yokota, who is in the back row. He can spike easily without blocking. This back row attack combined with a time differential attack was developed for the Munich Olympic Games, and was kept secret until the Munich Olympic Games.

A time differential attack with the back row attack.



## 'Cannons' Need Much Energy

The 'cannons' are much more exhausted than any other players in the match. For example, Oko spiked 312 times during 6 matches (25 games) in the international match against the Soviet Union's Men's team in the spring of 1972. It means that he spiked 52 times per match. As the total number of spikes on the All-Japan team was 1,174, Oko did 27% of that. Yokota had 268 spikes in the matches (6 matches, 22 games), so Oko and Yokota spiked 49.5% of all the spikes done by the All-Japan, in spite of their frequent absence from the games. If they played in all the games without any substitutes for them, the number of their spikes would be much more.

It is very common that a cannon spikes more than 100 times per match in a very close match. A cannon is required to have stamina. He should be tough and tenacious, since he has to spike much more than other players and hit the ball with all his might at every spike. If he doesn't have stamina, he cannot be a cannon any more. We play every day in the Olympic Games and the World Championships. You can see the reason why cannons should have much more stamina than any other player. Anyone can be a cannon if we have matches only every three or four days.

Yokota and Oko have excellent stamina, but are much exhausted if they have matches in succession every day, for they are human also. If they are exhausted, it is much harder to get points, as they are the cannons. Therefore, we should try to prevent them from becoming exhausted and try to keep them in good condition, sending substitutes in for them and making them rest on the bench, according to the situation. That is why we need substitutes who have almost the same power, skills and techniques as they do. Average players cannot be substitutes for cannons. The substitutes should also be cannons.

## Saito and Noguchi, Other Cannons

As well as Oko and Yokota, Saito and Noguchi are cannons. They not only substitute for Yokota and Oko, but also can do good jobs as cannons by themselves.

Tetsuo Saito is from Fukushima Prefecture, where he entered the Fuji Film Company after graduation from Soma High School. I was impressed with his height of 1.98 metres. I decided to pick him up for the National team without hesitation, though he was thin and had poor muscle power and techniques and skills in 1967, when we made our tour to Eastern Europe. Since then, Saito has trained harder and harder. In the Mexico Olympic Games, I picked him for one of the twelve players



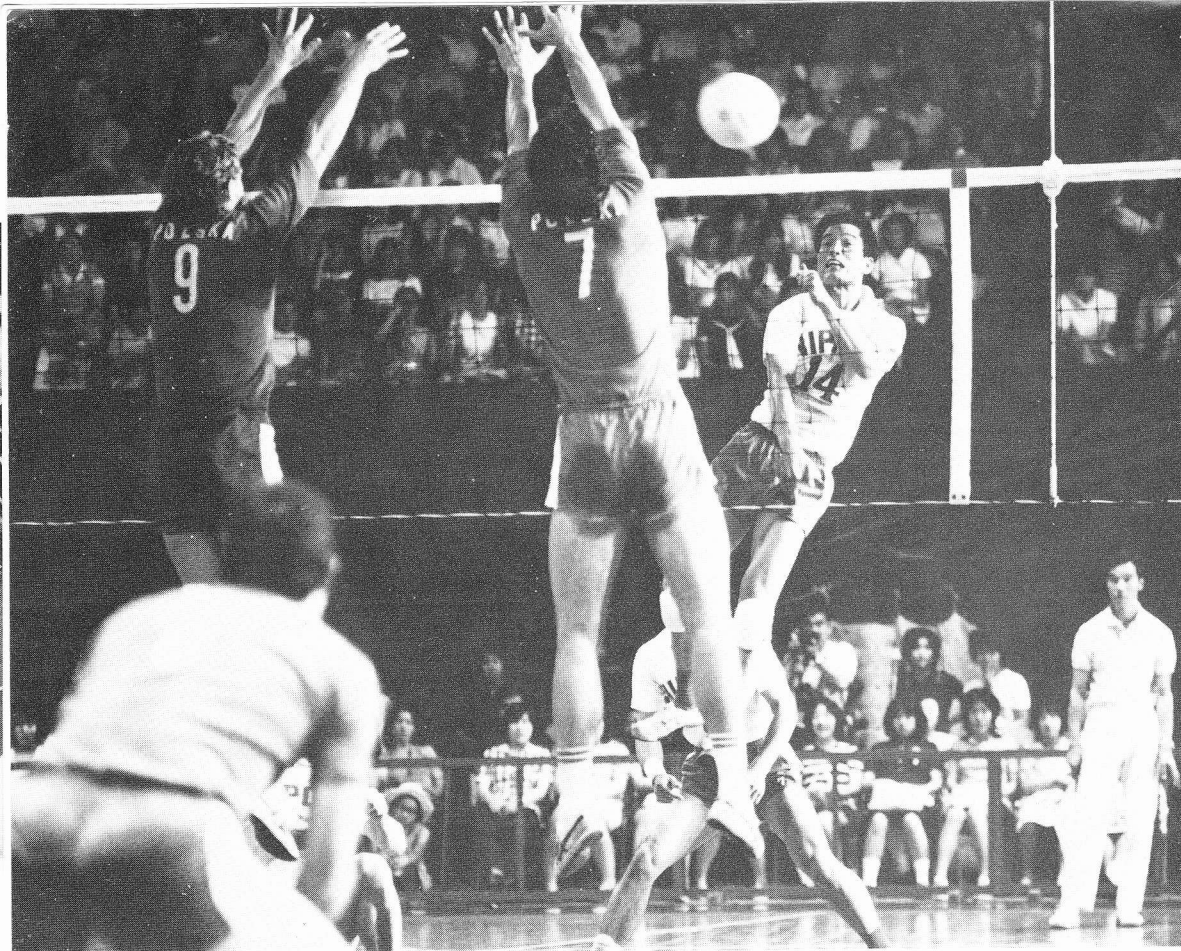
Saito spiking to the deep cross court.

When he was spiking, being not so tall, he boldly spiked without paying attention to the opponents blocking. I was impressed with his powerful spiking which penetrated the opposing blockers, but I was afraid that he could not be successful spiking in matches against foreign teams which had tall blockers. In fact, his spiking often was shut out by the blockers, even in domestic matches. I hesitate in inviting him to the National team. But I couldn't forget his courage and his power when spiking. Finally I selected him for the team in the international matches against the Soviet Union in the spring of 1971. He worked better than I expected. During the matches he continued to spike boldly and with all his might. He didn't care whether the sets were far from the net or not, or high or low. Moreover, he was never nervous, even in the close games. He kept on boldly spiking. Because the timing of his spiking was so different from Yokota, Oko and Saito, the Soviet team blockers were always troubled. Then I found we would be more successful if we used him as a cannon, according to the situation. We are sure to be strong for the Munich Olympic Games with Saito and Noguchi, cannons of the National team, beside Yokota and Oko.

on the team. I didn't expect him to be a player in the matches of the Olympic Games, but to gain experience through the Games. The effect of this experience was soon evident. In the World Cup of 1969 he displayed his real power as a cannon. During the matches, he often played in place of Yokota and Oko who were not as consistent, and he rendered great service to the team. His spikes which struck deeply in the area close to the end line bothered foreign teams. Saito, who now had self-confidence, mastered the techniques of a quick attack and a time differential attack, as well as an open attack. His techniques of blocking a defense have improved amazingly.

Yashuhiro Noguchi came to the National team in 1971, four years after Saito. He had been with the Matsushita Electric Company for two years after attending Nippon University. The reasons for his coming to the National team late were his lack of height and his inconsistent spiking techniques.





Noguchi spiking to the line.

### Cannons of the World

There are many excellent attackers in the top level teams which compete with us, but there are few who can completely spike the deep sets from behind. That is to say, it is very difficult for many spikers to successfully perform a two steps attack.

The Soviet Union has two cannons, Chulak and Kravchenko. Kravchenko is one of the "Megaton Trios", who were very famous for their spiking with power in the Mexico Olympic Games. He used to play at both sides and now in the front centre. He has fewer opportunities to spike with a two-step attack than before. Yet, still he sometimes displays great spiking ability when he spikes the sets from behind him at the front centre. His height is 1.96m and his weight 104 kg. Chulak has excellent jumping power, strong arms and shoulders and a height of 1.93m. He is very good at spiking with a high contact point and power, on the line court and on the sharp cross court.

Czechoslovakia's cannon is Petlak, who is 1.95 metres in height and weighs 98 kg. He attacks with powerful spikes and skillful tips at the open side and at the front centre.

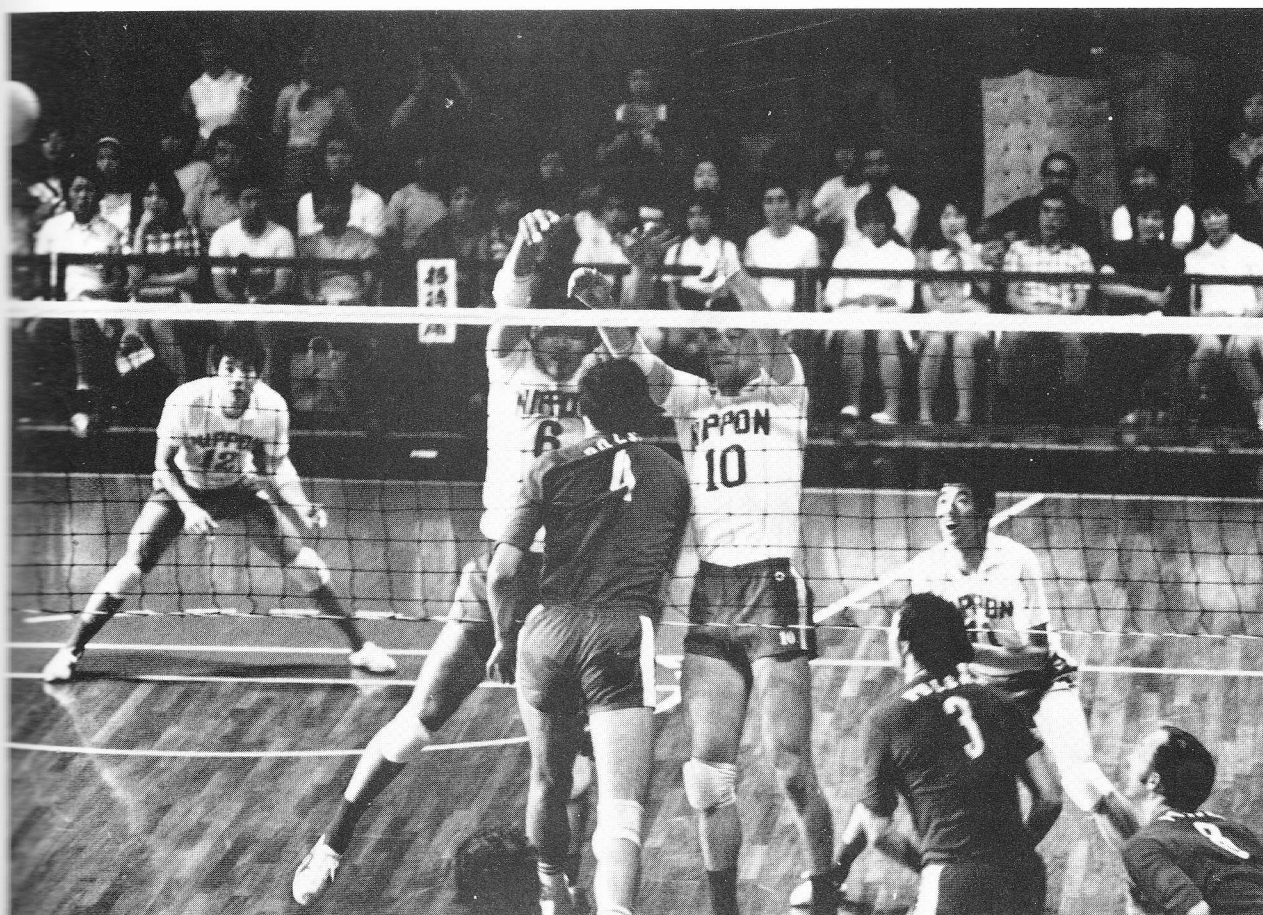
Both Schritz (1.95m) and Schneider (1.94m) of the G.D.R. have a high contact point in spiking. The

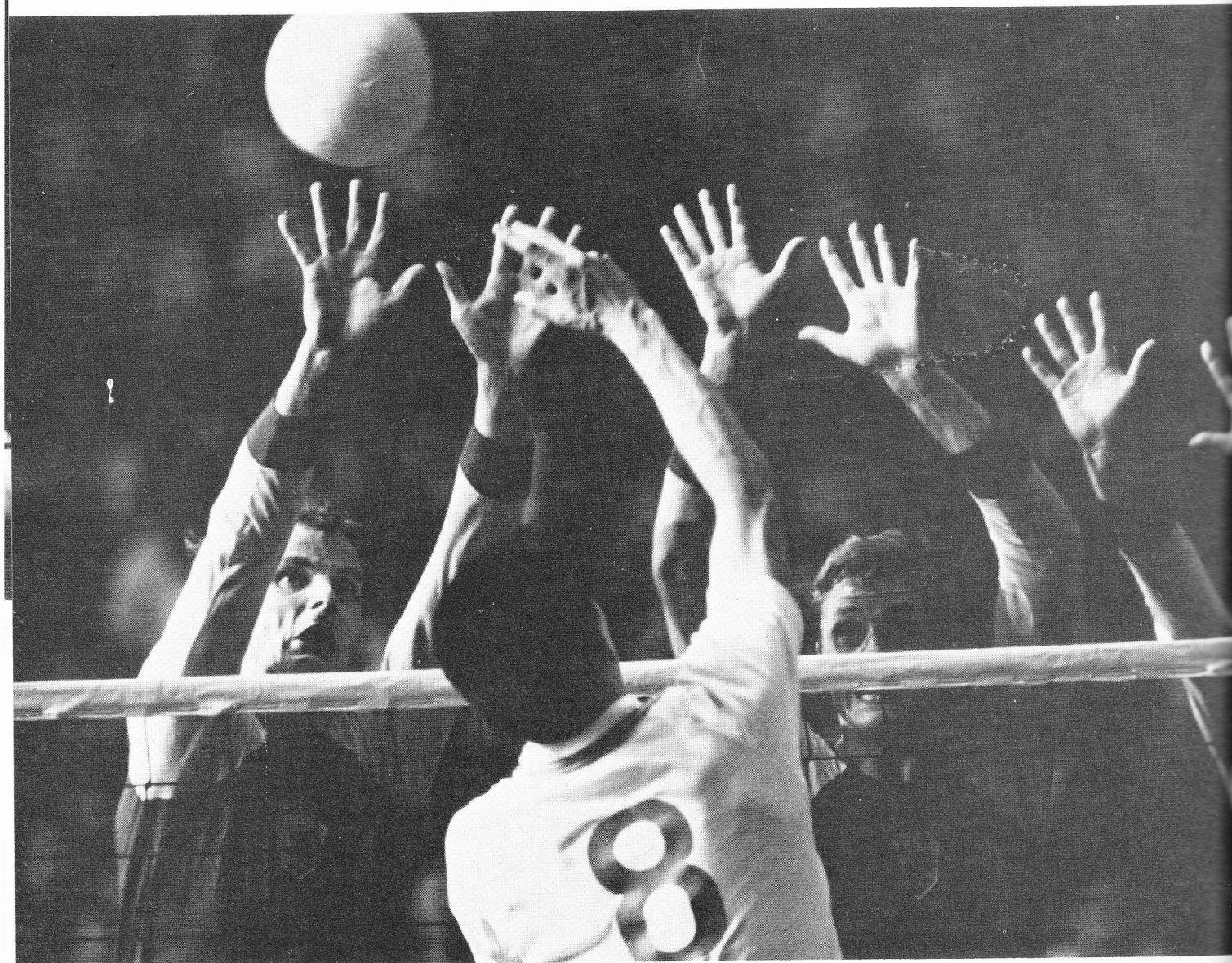
can place their spikes well when they spike powerfully the sets coming from behind, between the centre and the open side.

Skoleck (1.96m), Anblojack (2.00m) of Poland, and Udistianu (1.93m) of Romunia, spike with power so they are also called cannons. Recently they have begun to spike with a quick attack at the centre.

As stated above, the cannons of the world are not many, though there are many good spikers in the world.

The spike by Skolect, a cannon of Poland.





The blocking by the D.D.R. players against Morita (No. 8). Their blockers go very high without splitting.

### **Blocking — The Most Important Weapon for Points**

Blocking accompanies serving as the most important weapon in gaining points. All the players feel revitalized when they see the blockers shut out the opponents powerful spikes. Therefore, blocking is very influential on the players' mental condition. Even the flow of the game or the match can be changed with blocking.

When a opponent attacks using their best tactic from the service reception or from receiving a free ball, we can get a point if we are successful in blocking. In this case a point gained by successful blocking is of more value than some other points as it is gained when the opposing team is desperately trying with all their might to get a side-out. They are shocked and mentally damaged if our blockers are successful in their attack, when their offense is in a



good position, after their getting favourable points. On the other hand, our players are encouraged and play with more zeal. If we successfully block twice in a row, we can completely dominate them.

I have often seen the flow of the game change with only one successful block. Therefore, you can see how important blocking is. Because of the importance of blocking, all the countries in the world are trying desperately to improve their blocking techniques.

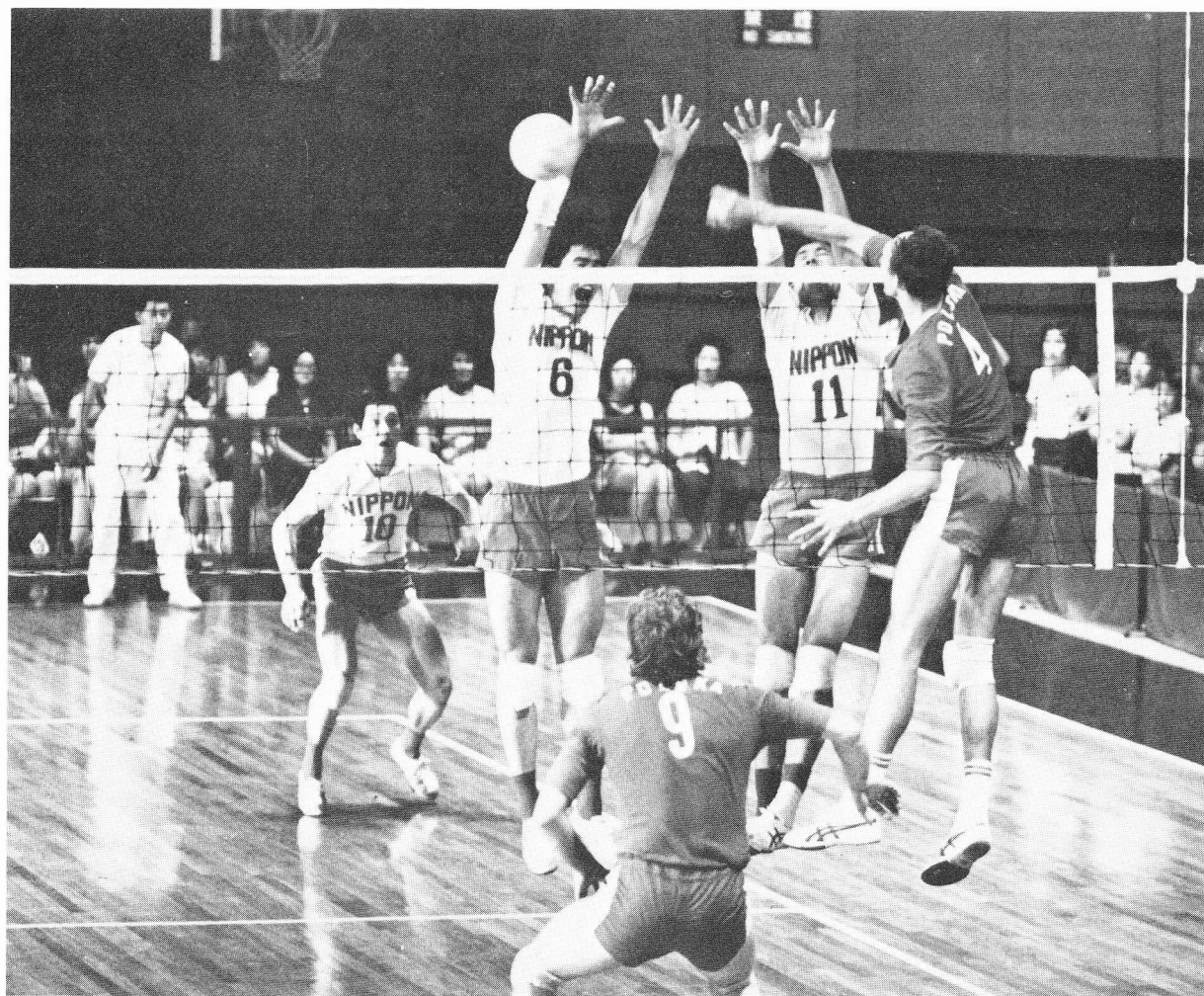
## A Star of Modern Volleyball

As a result of the improvement of blocking techniques, all the countries have earnestly set about to develop new tactics. If blocking was not as powerful as it is today, we could easily take a side-out and still get points. As blocking is very powerful, it is getting more difficult, using the usual attack patterns, to break and penetrate the opponents' blocking. New efforts and research into the development of new tactics to beat the opponents' blocking have resulted in various attack patterns. In a sense, we can say that blocking has made volleyball much more interesting and enjoyable than before.

It is blocking that is called a "star of modern volleyball". Until the Tokyo Olympic Games, a blockers hands could not reach over the net, so we could easily get a free ball when the ball bounded back against the opponents's blockers. It was almost impossible to get a side-out or a point while blocking.

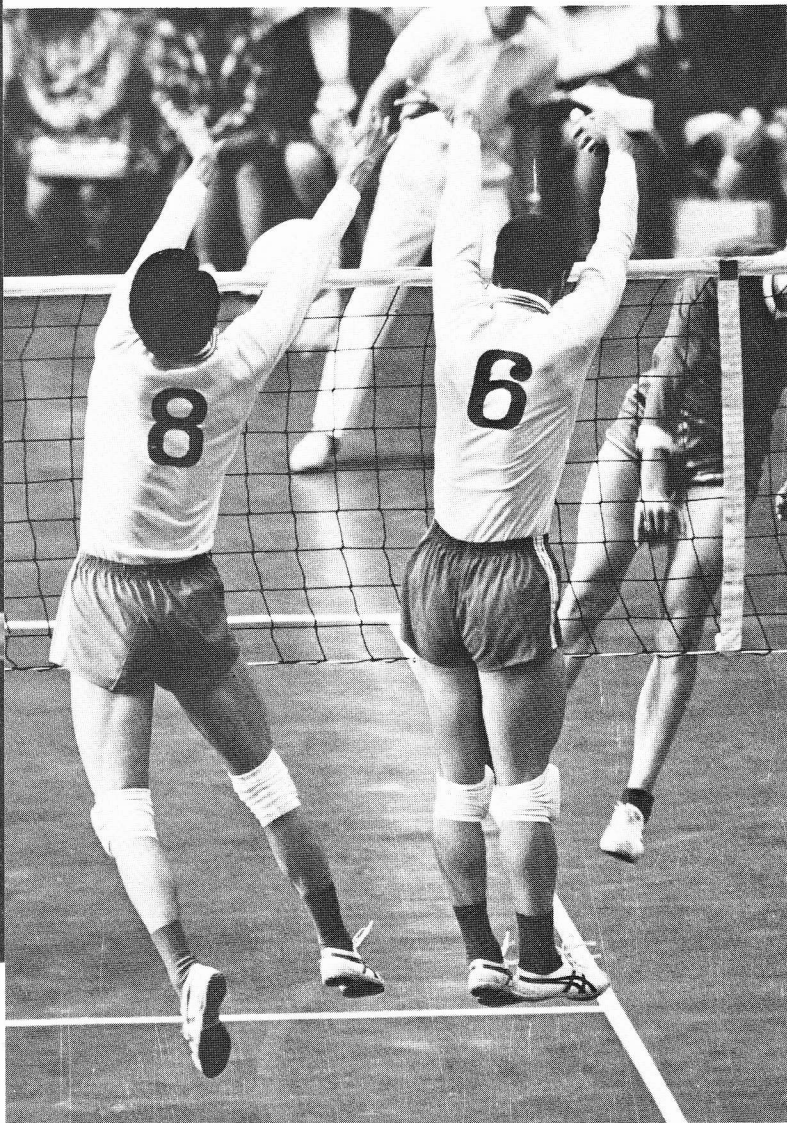
After the Tokyo Games it was permitted to reach over the net when blocking. As a result, the shorter Japanese could do nothing when the taller blockers

Blocking by Saito and Fukao.



of foreign countries stuck their hands over the net and pushed our spikes down, even if we did a quick attack. Therefore, we tried to get tall players for the National team and to make a quick attack or a combination attack at a high point than the opponents blockers. We were able to create and organize new tactics for that. We have developed tactics of more complicated combination attacks, which are very effective in making the opposing blockers useless. Now every country is trying to import these techniques and tactics.

Thus, the efforts and research aimed at making blocking futile have fostered the modern volleyball game with speed.



Blocking by Morita (No. 8) and Fukao (No. 6), shutting out the spike by Patkin of the Soviet Union.





1



2



3



4

#### Blocking by Morita and Yokota.

- ① They try to get good timing for blocking against spiking.
- ② They jump.
- ③ They reach their hands over the net.
- ④ The ball is dropping to the floor, after hitting their hands. The most important elements for blocking are:
  - i) To reach over the net like eaves,
  - ii) To tighten their hands at the moment of contact with the ball.

#### Perfect Blocking

In order to complete a perfect block, we have to include at least six elements:

1. Anticipate the opponent's attack,
2. Form the perfect posture for blocking in the air,
3. Jump as high as possible and stay in the air as long as possible,
4. Get good timing on the jump and stick hands over the net,
5. Be flexible and skillful in the air,
6. Take a ready position for covering immediately after the block.

- (1) It is senseless for the blocker to block where the opposing spiker is not attacking. So the blockers must anticipate as quickly as possible what the spiker is going to do, watching his movement and immediately jumping to block at the place where the attack is intended.





Fukao and Kimura try to receive the tip shot right after their blocking.

- (2,3) All the players are required to have these abilities.
- (4) Bad timing often causes too much distance between the blockers and the net. As a result, that ball will stay or drop between the blockers and the net.
- (5) Blockers are required to have flexibility and technique to enable them to react immediately to the attacker who is trying to place the ball. The blocker must be able to twist his body in the air and attack with a tip.
- (6) The blockers must correctly deal with the ball dropping beside them after they have touched it, as well as deal with the spiker, and must correctly deal with it, bounding from the opponents block, after his spiking. We must work hard on our techniques for covering. We, the Japanese National Team, have practiced these techniques extensively.

Players who have these six elements, as stated above, are perfect blockers.

### **The Effect of Blocking**

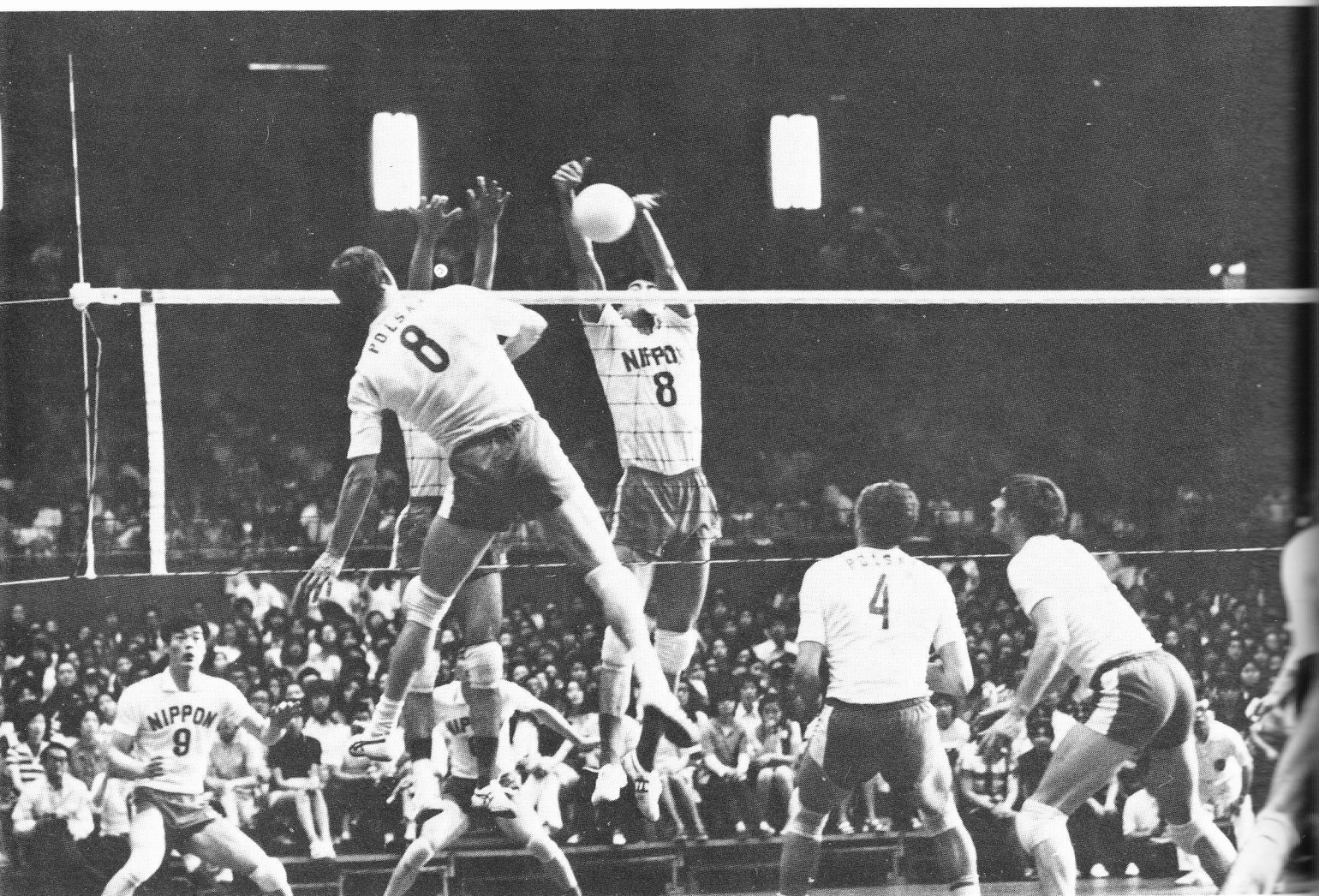
Blocking is done to shut out the spike, but it is not an easy task to shut out the Opponent's spikes. The opponent tries to use a quick attack or a combination attack and a tip or placement spike, and pierce through the blockers.

We cannot say that blocking is useless, because it is not easy to shut out the opponents' spike. We should be aware that blocking sometimes weakens the opponent's spike and can narrow the defense area. That is the effect of blocking. If the blockers don't jump against the opponent's spiking, he can easily spike with power on the court close to the attack line. No one can receive it successfully. If the blockers jump at the place where the spiker is trying to spike, they can shut out the spike or weaken it and a receiver will be able to receive it even if they cannot shut it out. Of course, the ball is hit with a two-steps attack. If the blockers interrupt on which the spike is intended, the spiker is obliged to spike on another course which may not be as effective. In this case, as he cannot spike with all his might, the receivers can easily receive the spike.

Moreover, blocking has a very important relationship with the defense system. Suppose that the opponent's spiker spikes the set above the net. At the left front, close to the side line, without blocking he can spike the ball anywhere on the court. If the blockers jump against his spiking, it is not necessary for the receivers to defend the area behind the blockers, except for a player to dig a tip. The receivers can defend the only area that is shut out by the blockers. It is very easy for the receivers to receive the opponent's spike as the blockers make the defense area narrower.



Fukao and Kimura are shutting out the cross-court spike with their blocking so the spiker hits on the line where the receiver is waiting.



Morita successfully shuts out the spike by Gositinjak of Poland.

### Middle Blockers

The main weapon of attack was the open attack. The best blocker always stayed at the outside in front of the opponent's ace hitter, and the other blocker jumped to the inside, with the outside blocker as the leader. As the modern game of volleyball was promoted and developed, the increase in attacking methods at the front centre area resulted in more importance being attached to blocking at the front centre, rather than at the outsides. It therefore has become very popular to put the best blocker at the front centre. He is called the middle blocker and is the ace blocker.

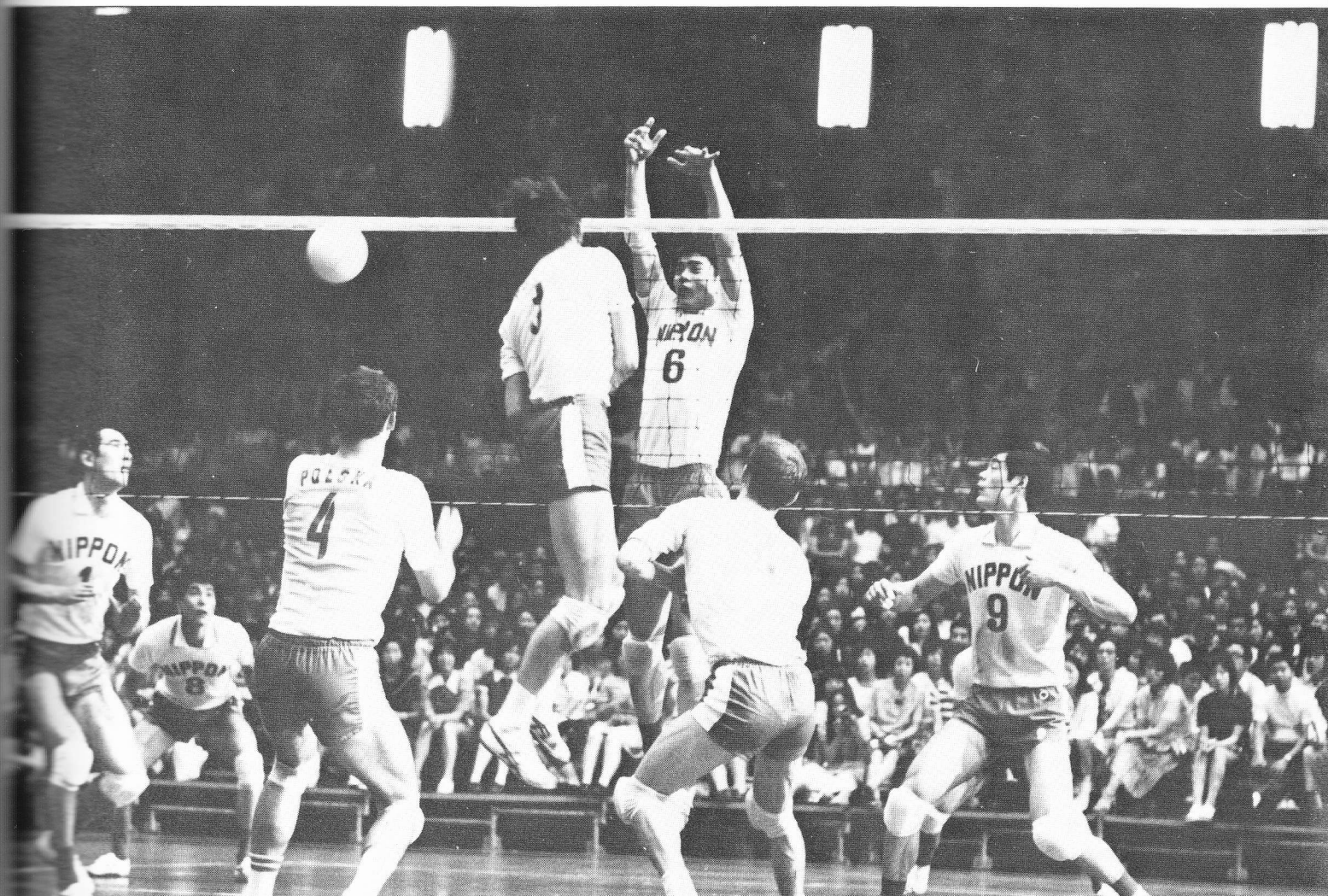
The middle blocker is required to be very tall. He has to jump many times to block against the complicated and quick attacks which occur so often in the centre area. It is impossible for him to jump with all his strength at every attack done by the opposition. Therefore, he should be tall enough to reach a very high point without jumping. The short blocker cannot be a middle blocker. The

middle blocker should have enough height to weaken the opponent's spike with a minimum jump, even if he cannot shut it out.

The middle blocker should also have enough ability to move quickly from the centre to the outside, following the opponent's open set. He must always keep a ready position for blocking at the centre and at the outsides.

The top three blockers in the world are Morita of Japan, Kravchenko of the Soviet Union, and Petlak of Czechoslovakia. While Kravchenko or Petlak stay at the front centre as middle blockers, the effect of the time differential attack, which the Japanese National Team is good at, is reduced by half. This is because they have enough height, technique and agility to block against both an A-quick and the semi-quick sets of a time differential attack. Morita possesses the same excellent techniques and height as they do. While he stands at the front centre, he is able to greatly bother the opponent with his blocking.





Fukao shuts out the quick attack by Bebel of Poland.

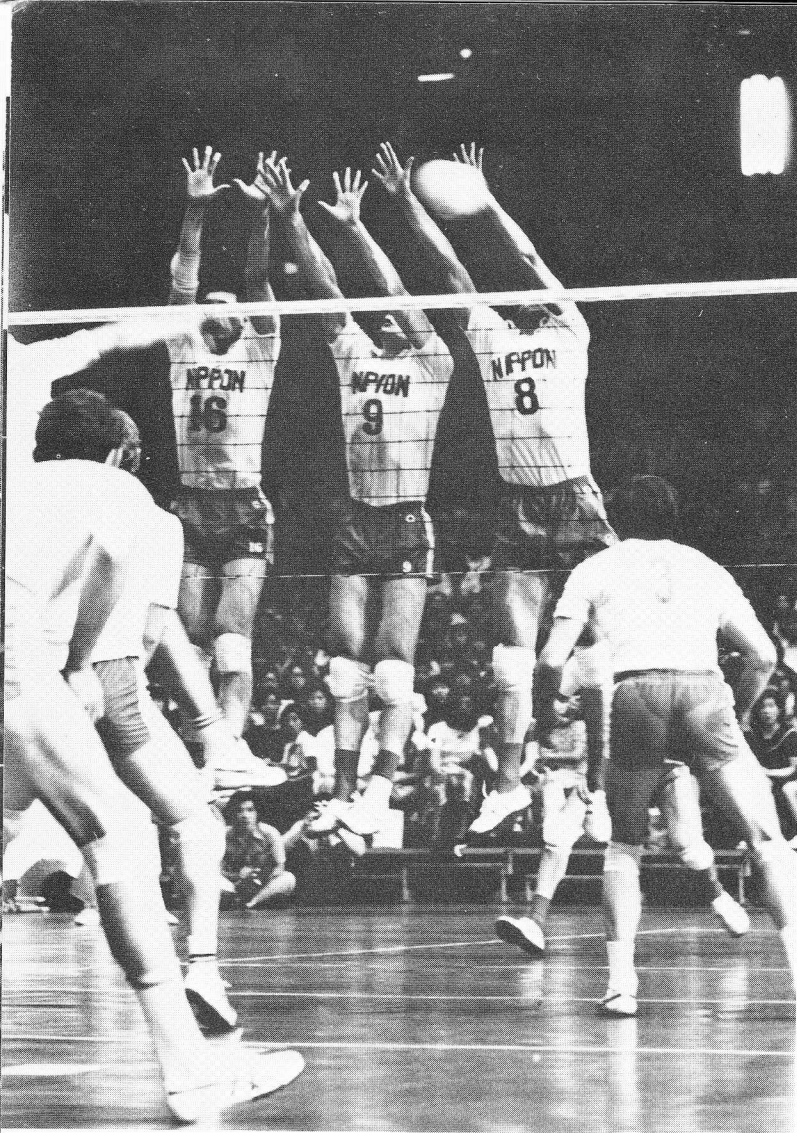
### **Fukao and Nishimoto, Potential Middle Blockers**

Okō, Fukao and Nishimoto are middle blockers of the National team along with Morita. Except for Okō, Fukao and Nishimoto are potential middle blockers, having very much improved.

Yoshihide Fukao, who entered the Toray Company after graduating from Hikone Engineering High School, was noticed for his quick spiking and blocking and came to the National team in 1970. Since then, through hard practice, he has steadily improved, as I expected. However, as he didn't have more excellent techniques than other players, though he had average skill in all techniques, he was almost compelled to give up being a National team player in 1971. At that time he roused himself up and began to practice hard again. In the expedition to Europe in the summer he performed exceptionally well in the matches against the Soviet Union and Czechoslovakia. He showed excellent spiking skills along with a quick attack and his blocking. He had much self-confidence and had

overcome his slump. Since then he has improved greatly and has been a valuable player as a middle blocker and a spiker with the quick and combination attacks.

Nishimoto, who was an employee of the Senbai Hiroshima Co. after graduating from Satoku High School, joined the National team in the spring of 1972. We needed his skill in the quick attack. He had been famous for his techniques of the quick attack in his high school days. His timing when spiking a quick set differs from the others as he bends his elbow, so the blockers are always confused when they block his spike. Moreover, he is very good at blocking. His excellent anticipation and perception, along with good timing, enable him to jump well and reach out over the net with great height. During our tour to the Soviet Union in the spring of 1972, he proved to be very good at quick attacks and blocking. He has been a good rival to Fukao on the National team.



Nishimoto (No. 16) is a good blocker as well as Morita (No. 8) and Yokota (No. 9).

## Defense

It takes approximately 0.333 seconds for the ball to travel from the spiker's hand to the end line on the opponents court when it is spiked with power from an area very close to the end, while the body reaction of a human being is 0.3 to 0.35 seconds (at time required for the body to react to the nerve stimulus). Therefore, defense is executed at the limit of man's ability. It is logically possible for a receiver to receive the ball hit by the spiker when it comes to the receiver directly.

In any event, every receiver has to defend an area of 3 metres by 4.5 metres. Actually, he has to defend a much larger area as the defensive area of the blockers is very small. The ball does not come often to an area the receiver can reach with his hands. Also, every spiker places the ball to an area where it is difficult for the receiver to dig it. Therefore, it is almost impossible for the receiver to dig the ball spiked with power.

When a team is in a match against a team of the same calibre, each can receive, to an extent, the spikes from the other's service reception. They are able to do this because they have the means to help widen the limit of man's ability.

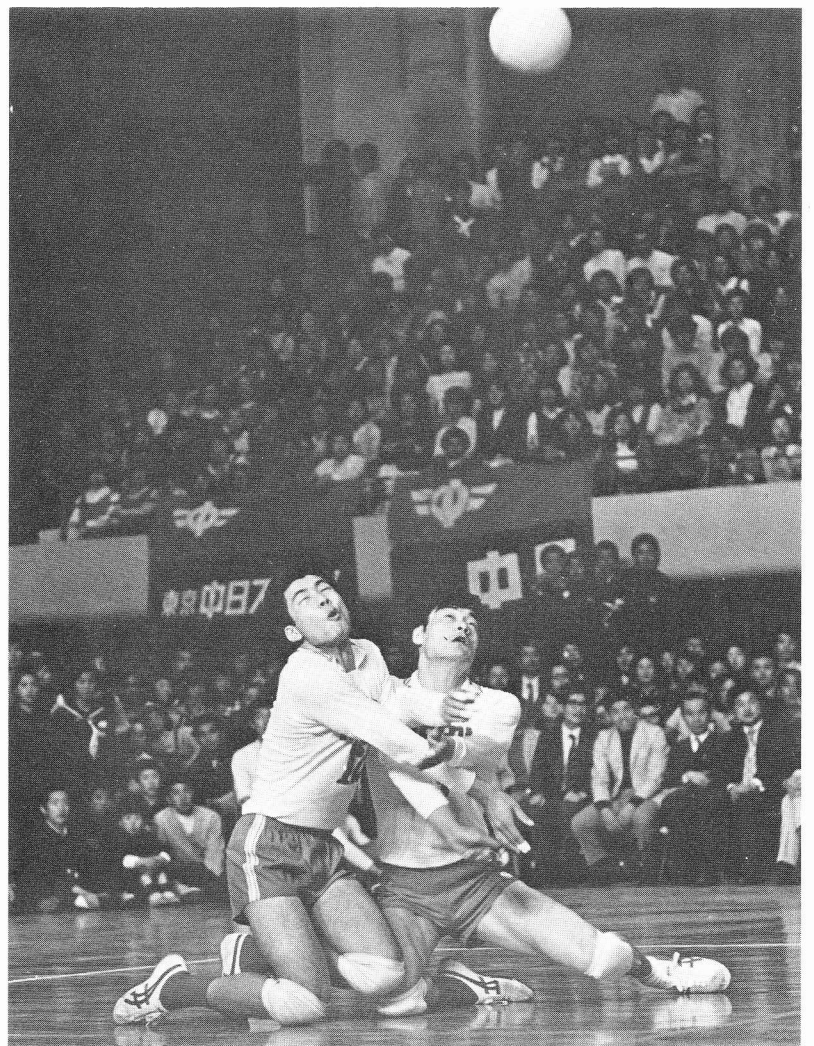
The win or loss of a match often depends on the techniques of the defense.





The Japanese defense is trying to receive the powerful spike of the Soviet player, rolling and diving.

Defense by Shimaoka (left) and Yokota (right).





### Anticipation in the Defense

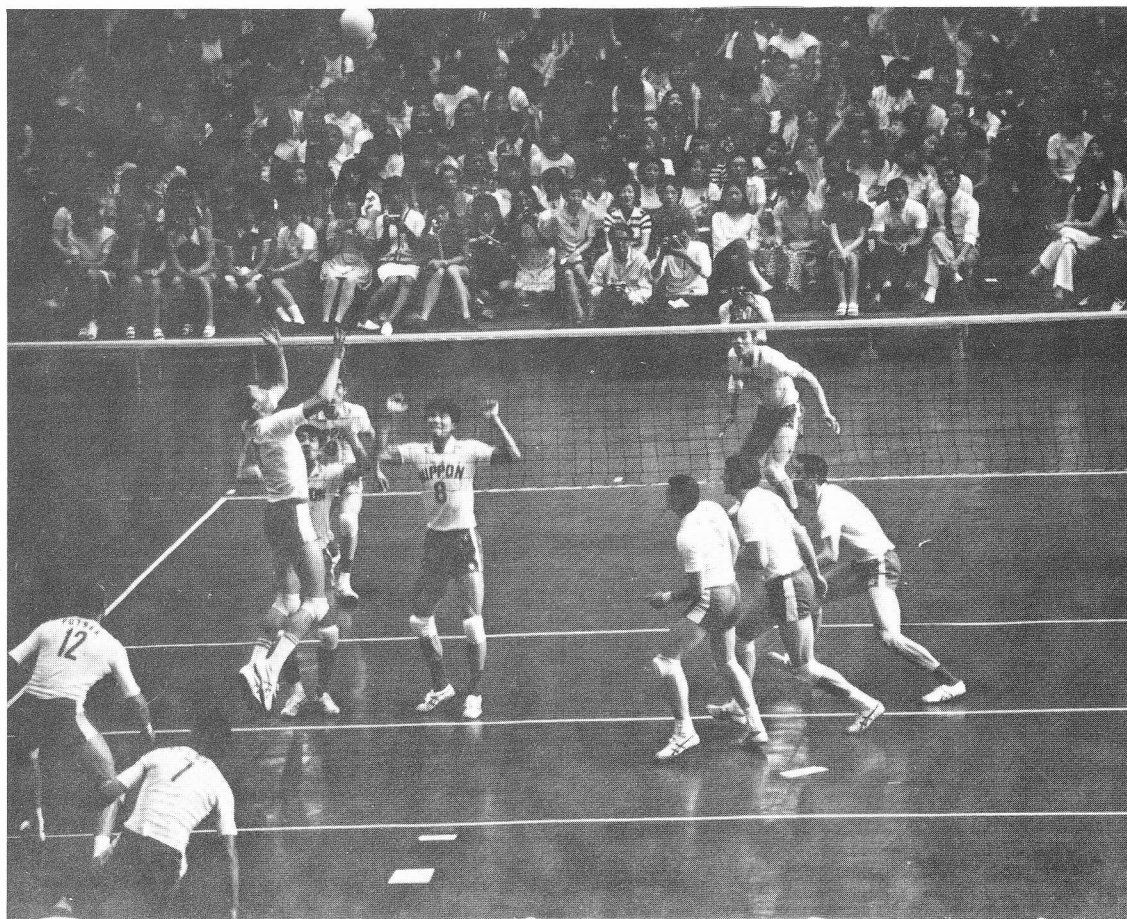
What means are used to extend the limit of man's ability? One way is through blocking. Blocking weakens the powerful spike by forcing the spiker to change the direction of the spike from the area that he knows he can spike well to, to an open course that he may not be as skillful in spiking to. That is to say, the method of blocking extends the limit of man's ability.

Another means of extending the limit of man's ability is through the anticipation with which the receiver can extend his defensive area. He anticipates the course of the opponent's spike and quickly moves to wait for the ball. When blocking and anticipation are joined, the limit of man's ability is greatly extended.

For example, the receiver automatically knows that the ball won't come to an area that is shut out by the blockers, so he moves to an open area which is not defended by them. Then, by watching the spiker's movement, he is able to anticipate the spiker's intention. If the spiker is trying to spike to him, he waits for the spike, taking a defensive position. If he sees that the spiker is trying to spike to another area, he takes a position for the tip or the unexpected spike or for the ball coming to him after

hitting the blockers' hands. In this way he can receive with fair success, thanks to the blocking and his own anticipation.

Defense by Japan against the attack of Skorek of Poland.



## Reaction and the Keen Senses in the Defense

The defense system works in close relation to the blocking system. We always defend only the area that cannot be shut out by the blockers, after considering how much area the block can cover. Outside of that, the receiver only pays attention to the tip and the ball coming to him after hitting the blockers' hands. Therefore, it is not many times that the spike is successful without being touched by the blockers or the receiver. On the contrary, though the first hit on the block decreases the power of the spiked ball, the ball has many directions to fly in after hitting the blockers' hands. It is very hard for the receivers to dig it. The receivers are therefore required to have good reaction and keen senses in order to receive the ball. At the sight of the blockers' movement and the opponent's (spiker) posture after his movement, the receiver anticipates the course of the spike and quickly moves to the area he feels the ball is likely to come. However, if the ball goes off the blockers' hands, it will not necessarily come to the area that the receiver waits in. It sometimes travels in an opposite direction. To correspond to that, the receivers must have good reactions and keen senses.

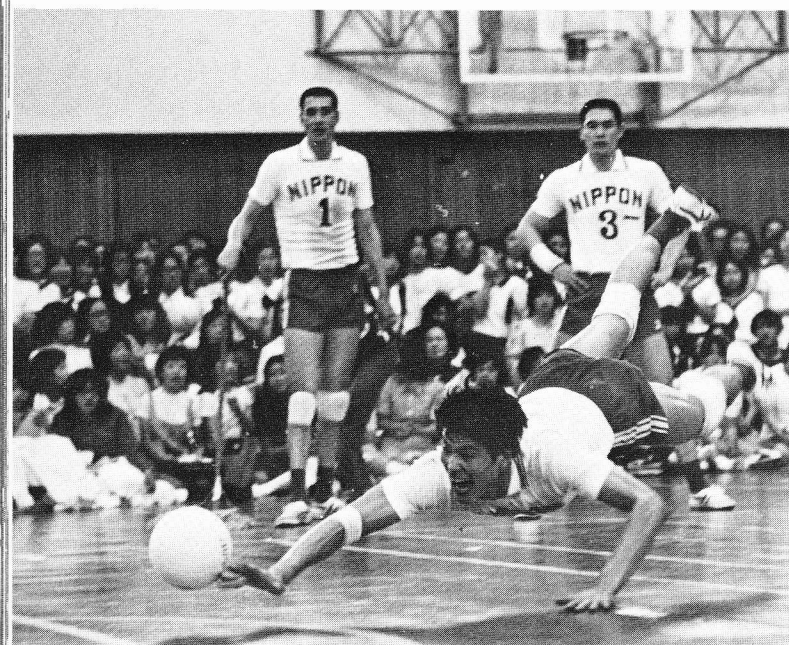
The same thing can happen when the receiver tries to receive a tip. It takes about 1.2 seconds for the tip to travel from above the net onto the floor, while the receiver can move forward 3.00 to 3.5 metres in 1.2 seconds. Therefore, he should stay within a 3 to 4 metre area from the point where the tip drops. The tip is essentially used to take advantage of the receivers lack of readiness. The tip can come when it is least expected. The most skillful tip is done by the spiker who pretends to spike with power until the last moment. The receivers only defense against the tip is his good reactions and keen senses.

For example, when the receiver defends against the line attack, if he stays close to the net to dig the tip, he cannot receive the line spike. If he stays close to the end line, he cannot receive the tip. So he must anticipate which attack will be used, the tip or the line spike. Good reaction and keen senses are natural and can be developed with hard practice and the experience gained by players in matches.

The players of Japan are trying to cover the ball which may be shut out by the opponent's blockers.







The hard practice of the defense bring success in the matches.

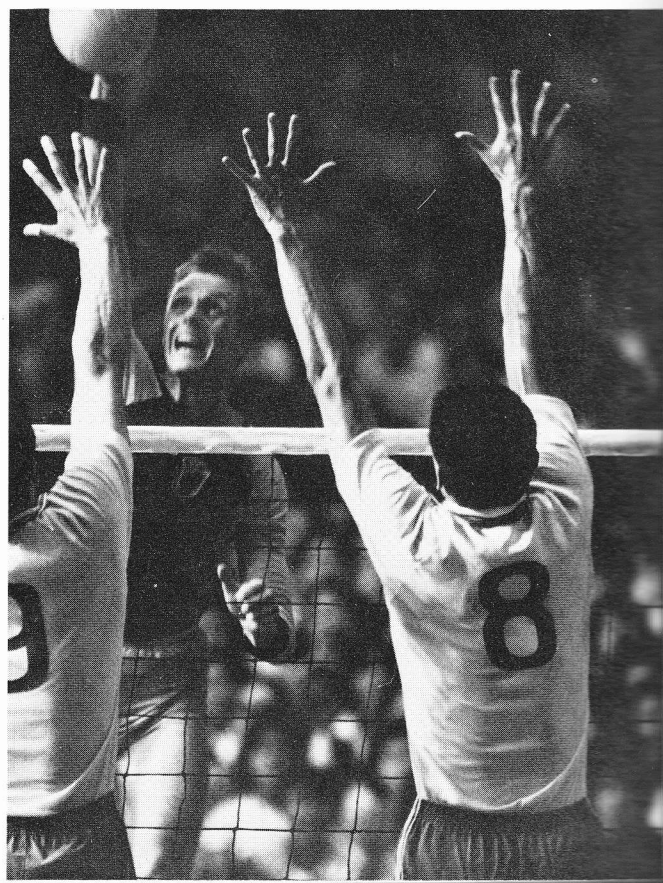
## Defense Tactics

Each country tries to develop modern volleyball and improve their blocking. Thus, there are no spikers who can spike over the blocker's hands on the shallow court. There are a few spikers who can place spikes using a high contact point. They include, Morita, Chulak, Schritz, Schneider and so on. The balls spiked by these men hit the blocker's hands and fly far away from the end line. This results in the wipe out. The tactics to correspond to this manoeuver are very important.

In the World Cup of 1969, though Morita and Koizumi earnestly tried to stop the spikes of Schritz and Schneider, when they were blocking, but all was in vain. The spikes of Schritz and Schneider flew far away from the end line after hitting the hands of the blockers. Therefore, we planned a defense tactic for them. I said to Morita and Koizumi, "Don't try to shut out their spikes by reaching over the net. Straighten your arms up as high a possible and try to push the ball up when you are blocking." I told the other players that the two receivers should stay close to both side lines for the shallow cross-court spike and the back centre should stay on the end line.

This defense formation was very effective. The blockers pushed the ball high and the back centre, who stayed on the end line, set it to the cannons, Oka, Yokota and Saito. That is to say, we used the two-steps attack successfully when we transferred the defense system to the offense. As a result, we achieved a sweeping victory over the D.D.R. This is one of the defense tactics based on anticipation.

The blockers of Japan cannot shut out the spike by Schneider of D.D.R., as his contact point is higher than the reach of Yokota (No. 9). So we have to plan another tactic against him.





## Mitsumori, One of the Outstanding Receivers in the World

Mitsumori possesses good anticipation, reactions and keen senses when playing on the defense. He came to the National team in 1965, just before the tour to China, when he was a freshman at the Chuo University. In 1966 he was not selected for the National team to attend the World Championships, as his service reception was very poor. This fact encouraged him to practice very hard and improve his service reception techniques. As a result he was selected for the National team for the tour to Europe in 1967.

He has keen senses by nature. He is able to play the role of machine gun or cannon, being of medium height at 1.85 metres. He often substituted for the cannons, Oko and Yokota, during the period from the Mexico Olympic Games to the World Championships in 1970 and was a very valuable member of the team.

His keen senses were developed through practice of the service reception and he started to be used on the defense. Moreover, he decided to be a specialist on defence as he was not so tall. This decision aided him in improving his reactions.

Mitsumori is much better at moving to dig the unexpected ball and the diving reception than Kimura, Nekoda and Shimaoka, who are also excellent on defense. Mitsumori, the top defense specialist in the world, says, "The successful defense consists of courage, anticipation and practice." His fine play encourages his teammates and depresses the opponents.

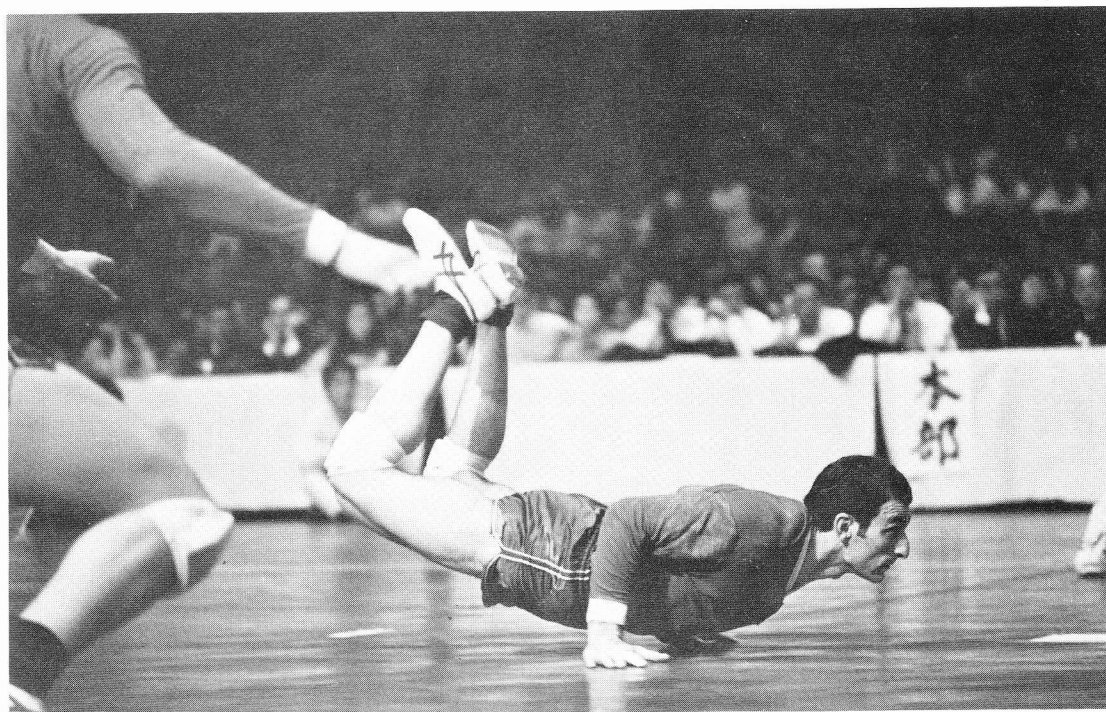
## Diving Reception

The "rolling reception" of the Japanese Women's National team was the talk of the world after the Tokyo Olympic Games. Now the diving reception by the Japanese Men's National team has become very popular at the Munich Olympic Games. This technique of diving was originally developed in the 9-men system volleyball. In those days, as the matches and practices were on outside courts, the players landed on both hands instead of on their chest and belly after diving, to prevent them from suffering skin abrasions.

Now, as practices and matches are held indoors, we can land with the chest on the smooth floor instead of the hands after diving. Therefore we can dive a farther distance and with more speed than before. We can extend the defense area with the diving reception.

This technique is used when a play may not be in time to receive the ball, no matter how fast he moves, to the side or forward. He dives toward the ball in the same manner as a swimmer dives, and receives the ball with one hand or two hands in the air. Then he lands and slides forward with his chest on the floor. Sliding forward softens the shock of the landing. a successful diving reception depends upon when and where the ball is contacted in the air. You should make contact with the ball at the highest point of the diving action, so your timing can be perfect for the correct contact. In order to be successful in this skill, you need to practice hard and develop good reactions and keen senses, as Mitsumori has.

Diving reception by Chulak of the Soviet Union. He lands with both hands.



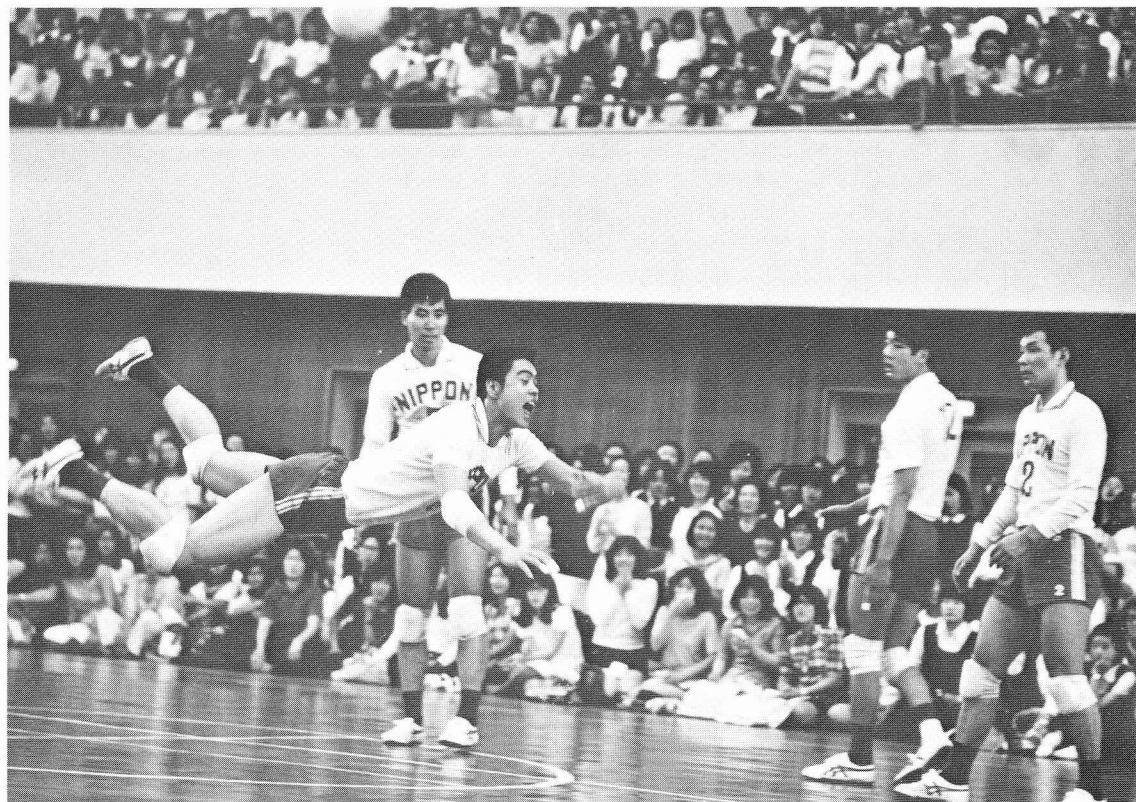


Diving reception to the side by Oko.

All the players on the National team are able to use this technique. When we first started to practice this technique, many players hit their chins against the floor on landing. They were able to keep practicing despite bruised chins and have now mastered this technique.

The Japanese way of diving is quite different from that of foreign players. We dive very high to reach the ball, while they dive and contact the ball with one hand, while landing with the other. Consequently they cannot dive very far or cover a big defensive area. The Japanese players' technique is much more efficient than that of the foreign players.





The moment he receives the ball successfully, keeping his body in the air, parallel to the floor.

## Volleyball and Rhythm

It is said that volleyball is a sport with rhythm. The rhythm of the game is essential for successful play. When we execute an offense or defense with rhythm, we can display more than our normal power. If we lose our rhythm, we lose our initiative and are usually defeated, without displaying even our normal power. Every team has its own rhythm and plays best if it can find and maintain it. In that regard, it is important to force the opponents to play in the rhythm of our team.

There are two methods used in order to break up the opposing team's rhythm. The first method used is a service ace. Playing with rhythm involves playing under natural conditions, without any problems, i.e., when the ball is well received and travels to the setter, and the setter sets it to the spiker who successfully spikes it with power. We must break up this rhythmic flow of the opposition, from the defense to the offense. The source of the rhythmic flow is the service reception. If the opponents are troubled with the reception of a hard serve, they lose their rhythmic flow.

If they are mentally confused by the service ace, they will be unable to play with their natural rhythm. The second method used to break up the flow of the opponents game is the successful block. We can greatly damage the opposition if we completely shut

Yokota blocks successfully against the attack of Poland. After that we are able to play with our own rhythm, as they lose theirs.





out their spike by blocking when they use their best plays. The opposing setter and spiker becomes depressed and begins to worry about the setting and spiking patterns they are doing. We are encouraged by the successful block. If we can successfully block their spikes twice in succession, they totally lose their rhythm. We, on the contrary, are able to play with rhythm.

The third method employed to break the flow of the game is a unexpected fine play. This can happen when one of the receivers makes a diving reception of the ball spiked by the opponent's ace spiker, when no one expects the ball to be received. The offensive side is depressed with this unexpected happening, and if the ball is successfully spiked by the defensive side, they are greatly discouraged. The defensive side who almost gave up receiving the ball becomes the offense and gains the opportunity to play with their own rhythm.

### **Tactics to Break Up Your Opponents Rhythm**

There are two tactics to break up the opponent's rhythm; a time-out and substitutions. We are allowed to take two time-outs per game for rest. Each time-out is 30 seconds. Though a time-out is taken for "rest", it is used mostly as a method of breaking the flow of the opposing team's game, as well as an opportunity for the coach to give the player some advice on offense or defense. The following are reasons for calling a time-out.

1. If you lose two consecutive points because of the opponent's powerful serve,
2. If you lose two or three consecutive points because of the opponent's attacking and blocking well,
3. If you lose two or three consecutive points due to errors by your own players (unforced errors).

The time-out should be used to stop the opponent's rhythm and break up the flow of their game by causing interruption, in most cases. Of course, the coach also gives the players advice on tactics during the time-out. For example, he may tell them, "You should jump earlier when blocking, you are jumping in the wrong direction, you should use quick attacks more often, stay a little farther back for the service reception," and so on. But this advice is not the main purpose of the time-out. This advice can be given to the players by other means from the bench, without taking a time-out, although coaching on the court is not permitted. The main purpose of the time-out is to stop the opponent's rhythm. The interruption of the game may weaken their drive and give them too much time to think about their good play on the offense and defense. This thinking about their play will greatly affect their rhythm.



Time out for rest. It is very effective in making the opponents lose their rhythm as it interrupts the smooth flow of their game.

Substitutions are often used as a tactic to break up the opponents rhythm. Two time-outs are allowed per game, while six substitutions are allowed. After the two time-outs have been used up, in a close game, substitutions are often used when we are afraid they are about to develop a flow in their game.

At the moment that the opponent's server stands ready and full of fighting spirit at the service line, and the opponent's continue to take advantage of their offensive flow, a substitution is called. As a result the servers spirit sags and the opponents cannot maintain the same rhythm because of the delay in the game.

Substitutions should also be used in order to maintain our rhythm or to overcome difficult situations by sending specialists on to the court. For example, substitutions can be used to:

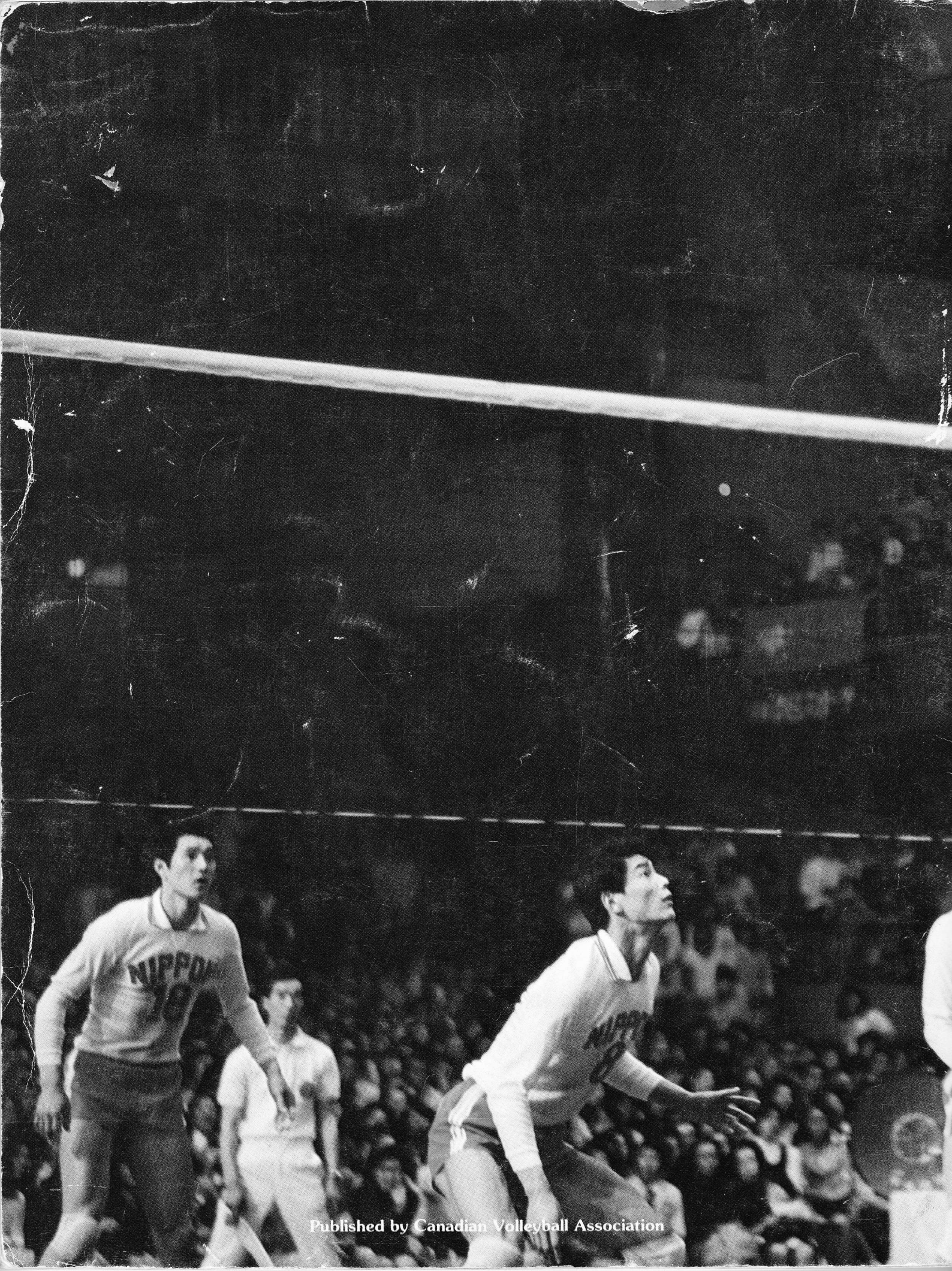
1. Send a specialist in for serving.
2. Send in a taller player for a more powerful attack and block, instead of the shorter setter in the front row,
3. Send in a defense specialist instead of a weak player on the defense when he comes to the back row,
4. Substitute the main spikers when they come to the back row, in order to give them some rest after they have worked hard in the front row.

You can see that except for the fourth example, these substitutions are done in order to keep our rhythm or change the flow of the opponent's game by re-inforcing their weak points.

Patterns of substitutions for the Japanese National team are fixed as follows:

Yokota, Oko for Saito, Noguchi  
Nekoda for Kimura  
Morita, Fukao for Minami, Nakamura  
Shimaoka for Nishimoto

You should be careful when substituting as it is feared that unnecessary substitution can give the opposition the opportunity to recover from a difficult situation and recover their rhythm. To rest the main spikers by substituting sometimes works to the disadvantage, as players are apt to lose their drive. Moreover, we sometimes lose our rhythm and at last even lose the games.



Published by Canadian Volleyball Association