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The 462th International Symposium on Therapy

The 462th International Symposium on Therapy was held by the Zoom Webinar on January 18, 2024. Dr. Ko Ichihashi, Director of the International Medical Society of Japan (IMSJ), presided over the meeting.

Watch the moment of recovery

- remarkable ultrasonography -

Introductory Message from the Chair

Ko Ichihashi, MD, PhD

Director, IMSJ

【Discourse】

The method to analyze international relations objectively A new approach based on IR theories

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In recent years, there has been a growing awareness in Japan of the importance of diversity. The idea that society is enriched by diversity in terms of nationality, race, gender, values, etc., is probably already accepted by many people. However, it is the international affairs that might prevent such a positive movement from moving forward.

Indeed, the word “diversity” may sound nonsense in the face of a sense of crisis, as if we ourselves might be caught up in a war. However, as long as we have an objective and scientific perspective on international affairs, we can separate what is necessary for a country from what we should respect as individuals. And if we can respect each other as individuals, this might be able to deter us to going to the war.

Knowledge of international relations (IR) theories are precisely what makes such objective analysis possible. In this report, I will explain the Balance of Power Theory, which is considered the most important among the IR theories. The international community is presumed as a state of anarchy in the Balance of Power Theory.

What is anarchy? In order to understand this concept, please imagine this situation. Imagine, for example, that there were no police, government, or courts in Japan. Would you be able to get along with your neighbors all the time? What would you do if your neighbor purchased a large quantity of weapons? The international community is in just such a situation.

In a state of anarchy, each nation has a decision whether or not to use military force, so that war can break out at any time. If some states are likely to use military force, it will be difficult for other states to escape the competition. In anarchy, the highest order goal of a state is survival. Power is a useful means to that end.

In an anarchic international society, nations act rationally to survive. What is the resultant situation for the international community as a whole? First, the strongest nation is most threatened by the second strongest nation. Therefore, the strongest

state prepares for the threat of the second strongest state by forming alliances with other states. The second strongest state does the same to prepare for the threat of the strongest state.

Thus, in the international community, a balance of power is naturally formed by two or more powers. The balance of power may break down for some reasons. However, as long as the international community remains in a state of anarchy, the balance of power is expected to be formed again.

In fact, the history of the international community shows that the cycle of spontaneous formation of the balance of power and the outbreak of large scale war when it breaks down has been repeated. Based on this theory, the international community has never been peaceful, but only stable as long as the balance of power is well maintained.

If this is the case, then changes in the distribution of power in the international community will affect the behavior of each nation. To understand how changes in the distribution of power in the international community affect the behavior of nations, this paper presents a model of power distribution limited to four nations (Japan, the United States, China, and Russia) as shown in Figure 1.

Figure 1. A Model of Power Distribution Limited to Four Nations (Today)

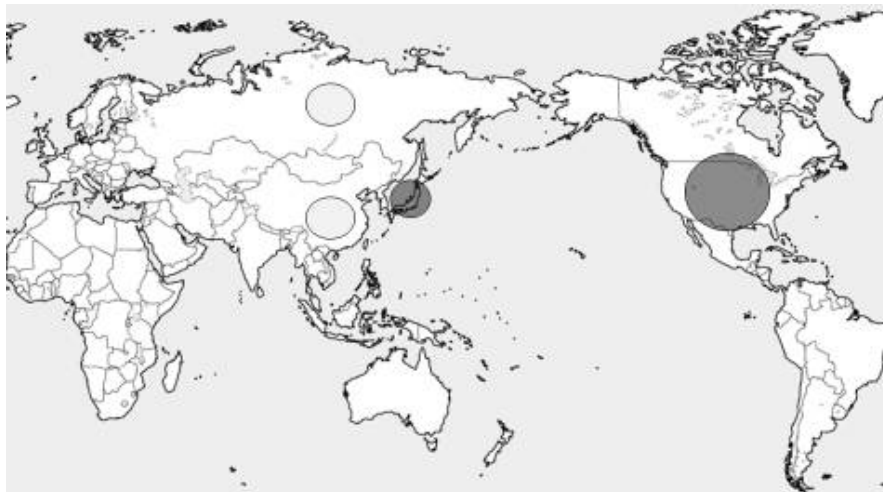
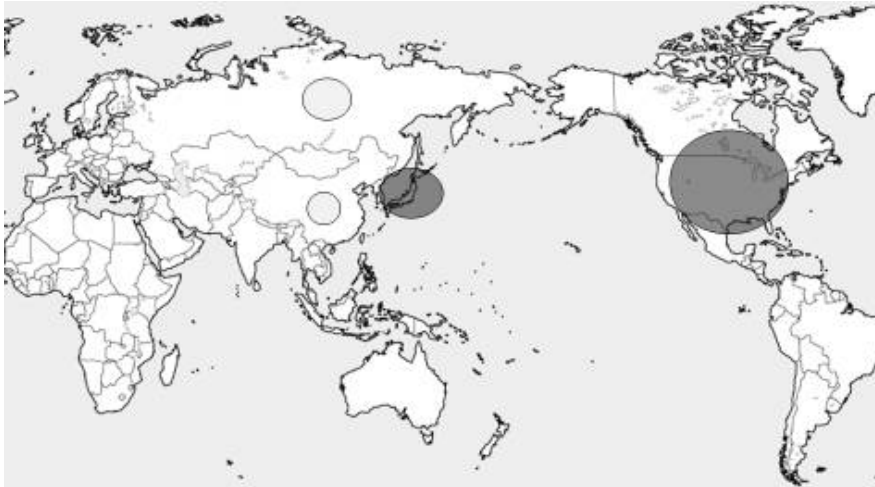


Figure 2. A Model of Power Distribution Limited to Four Nations (30 Years Ago)



The basic elements of the power of a nation are military and economic power. The U.S. has strong army, navy and air force. In addition to its conventional forces, the U.S. has overwhelming nuclear weapons capability. The U.S. also ranks first in the world in terms of economic power. Therefore, the power of the U.S. is the greatest compared to other countries (Figure 1). Russia has a nuclear weapons capability that rivals that of the United States.

Although China is inferior to the U.S. and Russia in nuclear weapons capability, it is currently the world's second largest economy. Therefore, it is estimated that China and Russia have about the same power (This model is only intended to give a sense of the concept of power distribution and is not based on a precise definition.) Japan's power would be slightly smaller than that of China and Russia.

Figure 1 shows the current power distribution of the four countries. Next, look at Figure 2. Figure 2 shows the power distribution of the four countries 30 years ago. At that time, the U.S. had an overwhelming advantage in military and economic power compared to the present. Japan was also the world's second largest economy. Therefore, Japan was able to ensure its own security simply by maintaining an alliance with the United States.

In recent years, however, as U.S. power has declined, Japan has been called upon to play a more active role in security issues. In this paper, I have presented a model limited to four states, but in the actual international community, there are many more states and they interact with each other in more complex ways.

In this paper, due to space limitations, I only introduce the most famous theory, the Balance of Power Theory. However, there are several other theories that are

useful in analyzing international affairs. These theories are explained in detail in my book, “Shin International Relations Theories” (East Press), published in August 2022. Please take a look at the book, if you are interested in.

Lecture I

Actual practice of ultrasound-guided reduction of pediatric intussusception

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I explained the clinical picture, diagnosis, and treatment of pediatric intussusception, and presented a video about the practice of ultrasound-guided reduction.

1 . What is pediatric intussusception?

Intussusception is a disease in which the proximal intestinal tract enters the anal intestinal tract and the intestinal tract overlaps, causing intestinal obstruction. The mesenteric artery and vein are drawn in along with the intestinal tract, resulting in strangulated intestinal obstruction. Therefore, it is important to relieve the obstruction through early diagnosis and early reduction.

Types of intussusception include ileo-colic, ileo-ileo-colic, colo-colic, and small-intestinal type. In children, most cases are of the ileocolic type, in which the terminal ileum passes through the ileocecal valve and inserts into the ascending colon from the cecum. The ileo-ileo-colic type often has pathological lead point such as Meckel's diverticulum. Pathological lead points include Meckel's diverticulum, duplicate intestinal tract, polyps, malignant lymphoma, and gastrointestinal lesions of IgA vasculitis.

2 . Clinical features of pediatric intussusception

The most common age of onset is from 6 months to 4 years of age. The three main symptoms are intermittent abdominal pain (uncomfortable and crying in infants), vomiting, and bloody stool (strawberry jelly-like), with abdominal pain being the most important in clinical practice. Since it can be easily diagnosed by ultrasound examination, recent cases can often be diagnosed only from the first episode of abdominal pain, and

there are more cases in which the three main symptoms are not present. The cause is often unknown, but it is often preceded by viral or bacterial enteritis.

3. Diagnosis and treatment of pediatric intussusception

Before ultrasound examinations, if we suspected intussusception based on the patient's age and symptoms, enema fluoroscopy was performed for both diagnosis and treatment. The diagnosis was confirmed by observing the crab claw sign, and the patient continued to undergo reduction with high-pressure enemas.

If intussusception is suspected after an ultrasound examination, it can be diagnosed almost 100%, so after the diagnosis of intussusception is confirmed, high-pressure enemas are performed using the method appropriate for each facility. High-pressure enemas include fluoroscopic reduction (using air or 6x diluted gastrografen) and ultrasound-guided reduction (using saline). If it is determined that reduction cannot be achieved with high-pressure enema, surgery is performed. Absolute contraindications to high-pressure enemas are patients with poor general condition, such as shock, peritonitis, and intestinal perforation.

The rule of threes, which emphasizes safety, has been historically and empirically used for high-pressure enemas. In other words, the height <pressure> is 3 feet, the time for one reduction is 3 minutes, and the number of times reduction is performed is 3 times. This was done in consideration of reducing radiation exposure under X-ray fluoroscopy, but exposure is not a problem under ultrasound, so it should be carried out 3 times, 3 minutes, on a case-by-case basis, taking into account the general condition. is considered possible.

The basic ultrasound images for diagnosing intussusception are a cross-sectional view (target sign) and a longitudinal view (pseudokidney sign) of the intussusception. A mass 3 to 4 cm in diameter is visualized just below the abdominal wall, so it is unlikely to be missed.

Fluoroscopic reduction must be performed in a fluoroscopic room, and although it is relatively easy to confirm reduction, there is radiation exposure. Ultrasonic reduction can be performed anywhere, including outpatient treatment rooms and hospital wards, and there is no radiation exposure, but experience and familiarity are required to confirm reduction. The difference between the two is the method of confirming the process of reduction, but in order to begin reduction under ultrasound, a person (a doctor or an ultrasound technologist) who can use ultrasound is required, and I believe that the hurdles to do so are quite high.

4. Actual practice of ultrasound-guided reduction of pediatric intussusception

I presented a video of the ultrasound-assisted reduction in 3 cases. The video of the moment of recovery is moving. It is often carried out in a well-lit environment with a family

member accompanying them. It is important to tightly close the anus and immobilize the lower limbs to prevent the balloon from falling out. Since ultrasound images are important in ultrasound-assisted reduction, it is important to provide adequate sedation at first.

Important findings during ultrasound reduction are: (1) peninsula sign (a peninsula-shaped mass protruding), (2) crab-claw sign (edematous ileocecal valve), (3) post-reduction doughnut sign (edematous terminal ileal wall), and (4) honeycomb sign (a finding in which saline has flowed into the small intestine and formed a honeycomb) are to be confirmed.

Lecture II

Capture a moment of reduction -The amazing of ultrasound-

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"Orthopaedics" is a Greek word derived from "orthos" meaning "straight" and "paedios" meaning "child". "Orthopaedics" means "the technique of preventing and correcting physical deformities in children". Since the declining birthrate and aging population, there are fewer opportunities for outpatient examination for pediatric musculoskeletal diseases, which were the origin of orthopaedics. As a result, missed or delayed diagnosis has become a problem. It is necessary to diagnose diseases that require early intervention at an appropriate time since children are still growing and developing. This presentation will discuss "Pulled Elbow," in which the moment of healing can be seen, and "Arthritis," in which ultrasound findings can lead to treatment.
