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## **Special Feature Article**

### **Physical Restraint in Yamanashi Prefectural Kita Hospital**

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#### **Abstract**

Although physical restraint is sometimes essential in psychiatric emergencies, its use in Japan is reported to be excessive.

In our institution, Yamanashi Prefectural Kita Hospital, only a few patients require restraint each year. This is not because we have tried to reduce restraint but because we have not used restraint historically.

The advantages of rarely using physical restraint are a reduced burden on patients and enhanced quality of medical care. The disadvantages are spending too much time and manpower, and inadequate response to physical management. Also, accidents can occur that would have been otherwise prevented by physical restraint.

There are several reasons for the use of excessive physical restraint in Japan. One may be related to instinctual characteristics typical of Japanese people, such as anxiety sensitivity and uncertainty avoidance. These characteristics might lead to excessive use of physical restraint to ensure patient safety. However, we must view physical restraint as a last resort.

Involuntary treatment, including physical restraint, should be implemented appropriately, so we should consider whether such treatment is being carried out in line with the patient's best interests and their values. Although it is difficult to judge the values of patients who lose competency to consent, we should establish the most appropriate procedure possible for determining the suitability of involuntary treatment. In our hospital, when judging whether involuntary treatment is appropriate, we assess competency and

consider patients' best interests before initiating it.

In the future, across Japan we must expand the implementation of ethically appropriate procedures for involuntary treatment, including physical restraint.

**Keywords:** physical restraint, involuntary treatment, best interest

### **Introduction.**

With the shift from the hospital to the community, the main role of psychiatric inpatient treatment has shifted from long-term hospitalization for the purpose of isolation to emergency acute care. Therefore, it is necessary to provide more appropriate emergency acute care. However, establishing evidence for emergency acute care in psychiatry is one of the most difficult areas. This is because informed consent (IC) is necessary to conduct high-quality studies, such as randomized controlled trials, which are necessary to establish evidence. However, IC for research participation may be more difficult for patients in acute care settings, where even IC for treatment is often difficult. This tendency may be more pronounced in patients with severe symptoms that require physical restraint.

Thus, because of the difficulty in establishing clear evidence, the treatment of acute emergency patients with severe symptoms is not uniform and is influenced by the traditions and

philosophies of individual hospitals, resulting in a high degree of variability (10).

In order to improve the overall quality of acute psychiatric emergency treatment in Japan, it is necessary to reduce such variations as much as possible and to spread the use of standardized treatment. In particular, physical restraint is the most painful form of psychiatric treatment for patients, and the problem of excessive physical restraint in Japan has been reported in the newspapers in recent years.

It is not easy to break away from the past tradition and minimize the use of physical restraint, but as a stepping stone, it is important to report the current situation of each medical institution and share the information with each other. For this reason, we would like to report on the situation of physical restraint at Yamanashi Prefectural Kita Hospital, especially in the acute phase of emergency. As described below, our hospital rarely uses

physical restraint, but we do not believe that our efforts are the best. We hope that this paper will lead to various discussions and to the development of emergency acute care in Japan.

### **I. Current Status of Physical Restraint in Japan**

There is no doubt that physical restraint is a necessary tool in psychiatric treatment. However, a major problem with physical restraint in Japan is the length of time and frequency of its use. Compared with the situation overseas, physical restraint in Japan is said to be longer and more frequent 7). For example, the average duration of physical restraint in Japan is 7.2 days in emergency wards and 4 days in emergency and acute care wards, while in Europe and the United States it is almost half a day or less, and the unit is hour.

In addition, the number of patients subjected to physical restraint has increased compared to 10 years ago 6). This may be due to the influence of restraint to prevent falls in patients with dementia, but it is a problem that needs to be addressed as soon as possible given the current trend toward minimizing behavioral restrictions.

However, it is said that there is considerable variation in the implementation of physical restraint among medical institutions 10). In a

study of 30 psychiatric emergency wards in Japan, there were several wards in which physical restraint was not used during the study period, but there were also wards in which physical restraint was used more than 80% of the time, and about 30% of all wards used restraints more than 20% of the time. Although various factors such as the number of inpatient admissions may have influenced the results, this variation is an indication that the use of physical restraint in the acute care of psychiatric emergencies in Japan has not been standardized, and efforts should be made to equalize this practice in the future.

### **II. Current Status of Physical Restraint in Yamanashi Prefectural Kita Hospital**

#### **1. Introduction to Yamanashi Prefectural Kita Hospital**

Our hospital is located in Yamanashi Prefecture with a population of about 800,000. It is a rural psychiatric hospital located about 40 minutes by car from the center of Kofu City, and plays the role of a core hospital. The hospital has 192 beds and consists of 4 closed wards: 1A (psychiatric emergency/medical observation law), 1B (general/polydipsia), 1C (general/adolescent/alcohol), and 2C (psychiatric emergency). The number of patients admitted and discharged annually is over 700, and the average

length of stay is less than 80 days.

## 2. Physical restraint and emergency acute care at Yamanashi Prefectural Kita Hospital

In our hospital, the number of patients admitted to the psychiatric emergency department who are physically restrained in bed is about 2 or 3 cases per year, which is considerably fewer than the average situation in Japan.

However, the reason why there are so few physical restraints is not clear. According to a doctor who has been working at our hospital for 40 years, physical restraint has not been used since that time, to the extent that there were no restraint belts, and there were almost no options for physical restraint when considering treatment. Therefore, when the hospital was rebuilt about 30 years ago, it was rebuilt without considering physical restraint, and even today, the structure makes it difficult to use physical restraint. For example, there are 11 seclusion rooms in the entire hospital and 5 in the two psychiatric emergency wards, but none of them are equipped with regular beds, and the doors are not large enough for a bed to pass through. Therefore, in order to apply physical restraints, the beds must be disassembled, carried into the seclusion room, and then reassembled. Because of the time and labor required for this process, physical restraint is not

considered as a treatment option unless the situation is very serious.

For this reason, intravenous haloperidol under physical restraint, which is a characteristic method of acute treatment of schizophrenia in Japan, is rarely used. In the first place, the use of short-acting injectable antipsychotic agents is itself infrequent. On the other hand, electroconvulsive therapy is relatively common and may be used at an early stage, in my opinion, because there is no data to compare and contrast. At our hospital, we are able to perform modified electroconvulsive therapy (mECT) 3 times a week, 5 cases at a time, and we perform about 600 cases a year.

To put it simply, nurses and other staff spend a great deal of time and manpower in dealing with patients who require physical restraint. The situations in which physical restraints are necessary include the risk of self-harm, medication refusal, and the need for physical management.

When the risk of self-harm or other harm is high, the staff should be involved frequently and as needed. When there is a risk of medication refusal, the patient should be involved frequently and, if necessary, with multiple staff members. When intravenous infusion is necessary for physical management, a nurse accompanies the patient until the end of

the infusion.

### 3. Advantages and disadvantages of less physical restraint

One of the advantages of not easily opting for physical restraint is that it reduces the burden on patients and improves the quality of medical care.

The psychological burden of physical restraint on patients may be quite large. A patient with schizophrenia who had been hospitalized in our hospital had a history of hospitalization in another hospital and was physically restrained at that time.

He was unable to go to the hospital after a relapse due to his strong refusal to go there, and he was admitted to our hospital. He said, "I feel safe in this hospital because I am not tied up". In this way, it is necessary to consider the possibility that the psychological burden of physical restraint may affect the continuity of treatment. In fact, it has been reported that the impression of treatment during the first week of hospitalization affects the outcome after one year 9).

In addition, since physical restraint is not an option at our hospital, the nurses spend a lot of time discussing how to ensure safety and treatment for each patient. The author believes that such discussions will lead to improvement of the quality of our medical care and the provision of individualized and

appropriate medical care. Physical restraints can more reliably prevent self-injury and other harm, provide reliable medication, and provide adequate physical control. These advantages of physical restraint that enhance safety give medical staff a sense of security, but this sense of security also has the danger of lowering the threshold for choosing physical restraint and making it difficult to consider other options. Although this may be somewhat off the subject of restraints, a review of covert medication 11) noted that once a decision is made to use it, the risk of abuse increases, resulting in a decline in the quality of care, and the same may be true of restraints.

On the other hand, disadvantages include the negative effects of spending too much time and manpower, inadequate response to physical management, and the occurrence of accidents that could have been prevented if physical restraints had been used.

In order to avoid physical restraint, it is sometimes necessary to spend a considerable amount of time and manpower on each patient, which may interfere with other tasks. This is only possible in a sparsely populated area such as Yamanashi Prefecture, and may be difficult for hospitals in urban areas.

For example, when a patient is

unsettled but needs fluids, we often administer fluids after sedation with intravenous flunitrazepam, accompanied by a nurse. However, the amount of fluid replacement may have to be lower than necessary because of early awakening or strong restlessness after awakening.

In addition, there are several incidents each year that could have been prevented if physical restraints had been used, such as violence against staff, hitting their head against the wall, self-inflicted injuries such as attempting to hang oneself with clothes, and falls in the seclusion room.

Thus, it is true that there are cases in which it might have been appropriate to use physical restraint.

### **III. Reasons for excessive use of physical restraints**

As mentioned above, physical restraint in Japan is excessive compared to Europe and the United States, and there are various reasons for this, such as differences in laws regarding behavioral restrictions and staff ratios. In this article, I would like to discuss the possibility that Japanese people's temperament has an influence on excessive physical restraint.

According to a questionnaire survey of countries around the world, Japan ranks first out of 13 countries in terms of the anxiety index 4) and 10th out of

65 countries in terms of the tendency to avoid uncertainty 3). In other words, it is possible that Japanese people are prone to anxiety and have a high tendency to avoid uncertain situations. Furthermore, Noda et al. reported in a survey of nurses working in psychiatric wards that their sense of safety in the wards was significantly lower than in previous studies in Europe 8).

Thus, when anxious Japanese medical staff, who tend to feel anxiety easily and have a high tendency to avoid uncertainty, want to ensure the safety of patients who are admitted to an environment where they cannot feel safe and where there is a risk of self-harm or harm, the choice to use physical restraint is a very natural thought process. It is proper for medical staff to assume various risks and respond appropriately to them. At the very least, the author does not believe that physical restraint in Japan has become excessive due to negligence or disregard for human rights. On the contrary, we Japanese, who are characterized by anxiety and uncertainty avoidance, often use physical restraint as the best measure to protect the safety of patients, and this is one of the reasons why physical restraint is excessive compared to Western countries.

However, few patients we see in acute emergency care are not at risk of self-inflicted injury or harm.

Therefore, even if it is to protect their safety, the easy choice of physical restraints is still excessive. It is essential to keep in mind that physical restraint is a last resort, and to consider the risks and benefits of using or not using physical restraint for each patient. In addition, it would be cruel for doctors and nurses, who in Japan have a tendency to worry, to bear the risk of not using physical restraints or removing them at an early stage. Therefore, it is necessary to establish a system in which decisions are not made by individuals, but by the team, and in which the team as a whole takes responsibility.

#### **IV. Appropriate use of coercive treatment, including physical restraint**

While we respect the autonomy of our patients, we also have a duty to provide necessary medical care to patients whose capacity to consent is impaired. For this reason, we often use coercive treatment, including but not limited to physical restraint, but only when it is in the best interest of the patient.

The best interest is considered to be based on medical facts and the values of the patient 1). Therefore, when coercive treatment is used, it must be appropriate as a medical fact. For example, in the case of drug treatment, it must be based on some evidence, and in the case of physical restraint, it must be performed under medically correct

procedures and management.

Regarding the patient's values, the author believes that how to consider the values of patients with impaired capacity to make consent decisions is one of the most important and most difficult aspects of psychiatric clinical practice.

Although it is common practice to defer to the judgment of a surrogate, such as a family member, as the person most likely to know the patient's values in good health, clinical practice may encounter situations in which there is no appropriate surrogate or the surrogate's judgment does not seem to reflect the patient's values. Another method is advance directives, but few patients currently use this method, and even if it were to become widespread in the future, it is natural for values to change from time to time, and many decisions cannot be made until the situation arises. Therefore, advance directives are not perfect in reflecting the patient's values.

In other words, it is impossible to derive an absolute correct answer to the values of a patient with impaired capacity to judge consent. Nevertheless, what we need to work on is to increase the probability, or "plausibility", of the patient's values 2). For example, a one-size-fits-all approach, such as deciding to isolate or restrain a patient when there is a risk of self-injury or other

harm, is not probable at all and should be considered on an individual basis. It is also more probable that a multidisciplinary team, including the patient and his or her representative, will be involved in the decision-making process, rather than just the physician or nurse in charge. In addition, the probability may be higher if it is discussed in a conference that deals with ethical issues.

Thus, when administering coercive treatment, including physical restraint, it is necessary to consider whether or not it is in the best interest of the patient in a more plausible manner. There may be limits to what can be done, depending on the circumstances of the hospital and the situation at the time, but considering the best interests of the patient under proper procedures as much as possible will lead to appropriate treatment.

#### **V. Review of compulsory treatment at Yamanashi Prefectural Kita Hospital**

Although we almost never use physical restraints in our clinic, we sometimes use forced drug administration or mECT due to persistent strong refusal to undergo treatment. However, in the past, treatment has been carried out under the personal judgment of the attending physician without following the proper procedures. Based on this reflection, we would like to introduce a

compulsory treatment review system that was started on a trial basis in 2012 in a psychiatric emergency ward with an inpatient ward designated under the Medical Observation Law, and has been implemented throughout the hospital since 2016 12).

Patients who refuse treatment even after 72 hours of hospitalization and are judged by the attending physician to be in need of compulsory treatment (medication or mECT) are eligible for this system. First, the attending physician prepares and submits an application for compulsory treatment. The application describes the content of the compulsory treatment, target symptoms, reasons for refusal of treatment, physical condition, availability and acceptance of alternative treatments, impact on quality of life if the patient does not receive the treatment, explanation of the treatment, consent of a substitute, and the need for expedited review. Upon receipt of the application form, the nurse in charge of the patient on the day of the review will request a psychologist to evaluate the patient's ability to consent to treatment, and arrange a date for this review to be held.

The patient's capacity to give consent will be assessed by a psychologist using the SICIATRI (Structured Interview for Competency and Incompetency Assessment Testing and Ranking



Inventory) 5). If the patient is found to have the capacity to give consent by this assessment, the application is rejected and no compulsory treatment is given.

If the patient's capacity to consent is assessed to be impaired, the results are documented in the application for compulsory treatment, and the appropriateness of the content of the compulsory treatment and whether or not it should be administered are reviewed. The medical director of the ward, the head nurse of the ward, and the psychologist who assessed the patient's capacity to consent to the treatment will review the application for compulsory treatment, the medical records, and the patient interview to determine the appropriateness of the treatment.

If, as a result of the review, the application for compulsory treatment is rejected, the reason for the rejection will be given to the attending physician, and the physician will discuss and advise on the future treatment. If the reviewer approves the request, the reviewer will notify and explain to the patient in writing that the reviewer has approved the compulsory treatment requested by the attending physician, the specific method of the treatment, and that the treatment will be conducted without the patient's consent.

In addition, the Compulsory Treatment Review System Committee

meets once a month to check the appropriateness of the content of the review and whether compulsory treatment is being given without review.

Based on the above procedures, compulsory treatment is being conducted at our hospital, but there are some issues to be addressed. First of all, the review is conducted only by the hospital staff, and no external committee members are involved. Normally, the participation of external committee members would be required, but due to time and personnel constraints, a system for their participation has not been established. In addition, the only treatments subject to review are mandatory medication and mECT, not isolation, restraint, or treatment for physical complications. Furthermore, this system requires the consent of the patient's guardian, but there is no provision for cases in which there is no guardian such as a family member.

There may be various issues other than those mentioned above, and we are reviewing them to the best extent possible at this stage, considering the actual situation at our hospital. Although it is still inadequate, we are proud to say that we have been able to discuss the appropriateness of compulsory treatment much more than before when there were no procedures. We hope to develop this system so that

it can be used for more appropriate review in the future.

### Conclusion.

Coercive treatment, including physical restraint, is sometimes essential in psychiatric clinical practice. However, it is necessary to recognize the fact that physical restraint, which causes the greatest distress to patients, is used excessively in Japan compared to the West, and this is an issue that needs to be improved immediately, no matter how much it is for the safety of patients.

First of all, it would be desirable for each medical institution to consider this issue and to establish a system to ensure that it is carried out under proper procedures as much as possible. However, the question of how to properly implement not only physical restraint, but also coercive treatment as a whole, while protecting the human rights of patients, should be addressed as a system for the entire country.

I hope that these discussions will be deepened in the future, and that a system for compulsory treatment under proper procedures will be established in the throughout Japan.

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