

Management of Dislocation Injury Physiotherapy at PhysioSET Physiotherapy Clinic in Malang City

Anggi Afan Darmawan
Department of Sport Science
Faculty of Sport Science
State University of Malang
Malang, Indonesia

Mulayani Surendra*
Department of Sport Science
Faculty of Sport Science
State University of Malang
Malang, Indonesia

Rias Gesang Kinanti
Department of Sport Science
Faculty of Sport Science
State University of Malang
Malang, Indonesia

Slamet Raharjo
Department of Sport Science
Faculty of Sport Science
State University of Malang
Malang, Indonesia

Abstract— Physiotherapy is one way to deal with sports injuries in a more modern way. Injuries caused by sports one of which is a dislocation injury. This dislocation injury must immediately receive medical attention so that the joints return to their position, with comprehensive treatment and management to accelerate recovery. Prevention to recovery from dislocation injuries is a basic aspect that must be given to dislocation injury patients. In this connection, it is necessary to discuss the management of dislocation injury physiotherapy. This research was conducted with the aim to find out how the management of dislocation injury physiotherapy at the PhysioSET Physiotherapy Clinic. The data analysis technique used in this study is the triangulation technique. The results of the study at the PhysioSET Physiotherapy Clinic use tools for handling patients including kinesiology tape, electrical tens, infrared, ultrasound, balance pad, gymball. The management of dislocation injury physiotherapy at PhysioSET Physiotherapy Clinic is getting treatment with isometric techniques with the concept of contraction and also stabilization training and muscle strengthening exercises around the injured area to support the joints so as not to experience reinjury. The recovery process at the PhysioSET Physiotherapy Clinic is carried out in four phases and collaboration with a physical trainer. After the dislocated patient has finished treatment at the clinic, he will be given a homeprograme for maximum self-recovery at home. From the above results it can be concluded that the management of dislocation injury physiotherapy in PhysioSET Physiotherapy Clinic is in accordance with the basic aspects of physiotherapy for comprehensive treatment and management. Suggestions in this study. The researchers should further develop the scope of the study, considering the research carried out is not yet fully able to describe broadly about the management of dislocation injury physiotherapy. In the process of collecting data, you should use techniques that can be more optimal in getting the required data.

Keywords— *physiotherapy, dislocation injury*

I. INTRODUCTION

Sports can be said to support the quality of human life, because exercise has benefits for physical and mental health. On the other side of the many benefits of sports, do not rule out the possibility of injury caused by sports, even sports that are done with the right and proper techniques can still be affected by unexpected accidents that cause injury. According to Meeuwisse (2007: 215) "injury occurs when energy is transferred to the body in an amount or at a level that exceeds the threshold that can cause damage to human tissue". Sports injuries are often responded by the body with inflammatory signs consisting of rubor (red), tumor (swelling), calor (heat), dolor (pain) and functiolaesa (decreased function) (Setiawan, 2011: 94). Sports injuries if you do not get the right handler will have an impact on physical function disorders of the body to exercise again.

In general sports injuries can be interpreted as injuries that occur when exercising (exercise) even after exercising (exercise). According to James (2014) "exercise involves thorough actions throughout all parts of the body and very rapid lateral movements in response to external stimuli that cause a risk of injury". Even sports that are done with the right and proper technique can still be affected by unexpected accidents that cause injury. Injuries caused by sports one of which is a dislocation injury.

Dislocation injuries are joint injuries that occur when the bone shifts or exits its normal position. According to Meikahani and Kriswanto (2015: 18) "understanding of dislocation injuries is injuries that occur when the joints are detached from their proper position". In the human body there are several joints that can be dislocated, including the shoulder joint, knee joint, hip joint, and ankle. Sanders (2017: 1) states

that this injury often results in disruption of the medial soft tissue and articular cartilage injury. This dislocation injury occurs because of the hard impact experienced by the joints, especially in sports that use physical contact such as soccer, basketball, martial arts.

This dislocation injury physiotherapy is carried out according to the area and the severity of the injury suffered by the patient. This dislocation injury must immediately receive medical attention so that the joints return to their position, with comprehensive treatment and management to accelerate recovery. Comprehensive management includes five things that are very important, namely taking preventive measures, first aid, treatment, treatment and recovery of sports injuries (Surendra, 2012). Joints that have had dislocation injuries are prone to further dislocation injuries in the future.

Prevention to recovery from dislocation injuries is a basic aspect that must be given to dislocation injury patients. By providing measures ranging from prevention to recovery, it is expected that dislocation injury patients can recover as before dislocation injuries, both at the location of the injury and physical fitness in general. The purpose of the research carried out at the PhysioSET Physiotherapy clinic in Malang was to find out the management of dislocation injury physiotherapy at the PhysioSET Physiotherapy Clinic in Malang.

II. METHODS

This research is a descriptive research. Descriptive research including surveys and fact-finding of various types of objects that have the main goal is a description of the situation as it exists today (Khotari, 2004: 2). Descriptive research is different from experimental research, in descriptive research there is no treatment and hypothesis testing. In accordance with the objectives of this study, the approach used is a qualitative descriptive approach to the type of research using survey methods.

Data analysis is a very important step in research to get a conclusion. To test the validity of the data obtained, in this study, researchers used triangulation techniques to analyze data. Triangulation technique is a technique to check the validity of data using the help of several things (Febri, 2014: 475). The triangulation technique was carried out to reassert the practice carried out by the physiotherapist together with the basic theories of physiotherapy at the PhysioSET Physiotherapy Clinic.

The location of this research is located in the middle of Malang City. Which is located at Ruko Ditas Kv 28 Jalan M.T. Haryono No. 09 Dinoyo Lowokwaru Urban Village, Malang. The reason researchers chose the PhysioSET Clinic as a place of research was because the location was not far from Malang State University which facilitated research and accelerated the research process.

To obtain validity, researchers used deepening observation techniques by checking the suitability of the results of cases that actually occurred in the field.

III. RESULTS

The data collection process for dislocated injured patients in the PhysioSET Physiotherapy Clinic is recorded on the medical record sheet. In the patient data collection process, the physiotherapist will provide an assessment of dislocation injured patients. Dislocation injury patients who come to PhysioSET Physiotherapy Clinic experience dislocation injuries in the shoulder and knee joints. Dislocation injury patients who come to PhysioSET Physiotherapy Clinic experience injuries caused by exercise, due to collision and weakness of muscle tissue and ligaments from the patient's body. PhysioSET Physiotherapy Clinic has not collaborated with expert doctors for the treatment of dislocation injured patients. Dislocation injury treatment process is carried out in a matter of months, a maximum of two months of treatment. Indicators of the maintenance process can be continued to the recovery phase that is seen from the increased stability of all components are ready to receive exercise programs.

The treatment process is carried out by first removing the pain after dislocation injury by using isometric techniques with the concept of contraction. For the tool, use a tool called electrical tens to reduce the pain for ten minutes with a frequency according to the tolerance of the patient. Then for dislocation injuries, it is not only a joint problem, but there is a network of ligaments that are attracted (overstretched). For ligament problems, stabilization exercises and muscle strengthening exercises around the area affected by dislocation injuries to support the joints so as not to experience reinjury (back injury). Also use a device called ultrasound to accelerate ligament stability. Meanwhile, to maintain stability using kinesiology tape which is to protect the joints. For chronic dislocation injuries, use an infrared device. In this treatment process, our indication that this patient is ready to receive exercise in the recovery phase is to look at the stability of all components, i.e., starting from ligament stability, muscle strength around the joint that has been injured by dislocation, and there is no pain experienced by the patient itself.

The recovery process at the PhysioSET Physiotherapy Clinic is carried out with four phases and collaboration with physical trainers for athletes. In this recovery process, dislocation injured patients are given treatment or training to be able to recover from their injuries. For each phase the treatment must be different, phase one exercises according to the complaint, relieving pain, maximizing the scope of joint motion. After phase one is completed to move up to phase two there is a test, namely a single leg standing test for 60 seconds for the lower limbs and holding the body with one hand to the surface for 60 seconds for the upper limb. If the patient is able then he can move up to phase two. In phase two the exercise is adjusted, in phase two there are functional patterns to correct patterns that are still wrong. There are flexibility exercises and minimal strength training. To move up to phase three there is

also a test, which is to stand for the lower limbs and hold the body with the hands for the upper limbs on an unstable surface by using a tool for 60 seconds. The tools used are balance pad and gymball. In phase three the training is strength training no longer a minimum strength training with the notes must be collaboration with a physical trainer. As for phase four, the realm of physical trainers is for athletes who are set for non-athletes, namely the physiotherapist himself who trains to prepare dislocation injured patients for return to sport.

This recovery process affects the psychology of dislocation injury patients if there is no increase in the patient in each phase. After the recovery process at the PhysioSET Physiotherapy Clinic, dislocation injured patients get a homeprogame to do their own exercise at home. This homeprogame is the same as the exercise given by the physiotherapist when in the clinic.

Dislocation injuries occur when the patient is doing basketball. Furthermore, patients get treatment measures to reduce the pain caused by dislocation injuries. After the dislocated injured patient at the PhysioSET Physiotherapy Clinic gets treatment, then get a recovery action. This recovery went through four phases and was handled by a physical trainer. The percentage of success rate of recovery of patients after dislocation injury cannot reach 100%, but is in the range of 90%.

Things that will be discussed in the data presentation and research findings from observations are about the existing facilities and what the condition of the PhysioSET Physiotherapy Clinic in Malang. The PhysioSET Physiotherapy Clinic is located in Ruko Ditas Kv. 28 Jalan M.T. Haryono No. 09 Dinoyo Urban Lowokwaru District Malang. The PhysioSET Physiotherapy Clinic's operating hours are open from 10:00 to 16:00. The PhysioSET Physiotherapy Clinic location itself is very strategic and easy to find and easy to reach by private vehicles or public transportation. The entrance to the PhysioSET Physiotherapy Clinic faces west.

The PhysioSET Physiotherapy Clinic has several facilities, namely a number of tools used to treat patients including kinesiology tape, electrical tens, infrared, untrasound, gymball, balance pad, and there is room for patient care that can accommodate two patients. There is also a waiting room provided by the PhysioSET Physiotherapy Clinic which is equipped with a bathroom. For facilities outside the clinic that is also a place to sit for waiting and there is ample parking space.

IV. DISCUSSION

The PhysioSET Physiotherapy Clinic was established aiming to help restore the function of human motion from movement disorders or injuries. In its application the PhysioSET Physiotherapy Clinic is engaged in sports, namely in the process of mentoring and rehabilitation so that it can restore individual or team skills efficiently. Injured patients come to the clinic to get an assessment from the physiotherapist

and recorded on a medical record sheet. On the medical record sheet, the medical record number is consistently recorded according to the month and the serial number of the patient, the patient's personal data, complaints felt by the patient and the history of the injury and written diagnosis for the patient. After getting an assessment from the physiotherapist, the patient will get treatment or action if the patient agrees with the assessment given by the physiotherapist. Actions (treatment) will be adjusted to the injury suffered by the patient. The action (treatment) includes several things, including treatment measures (curative) after the patient gets first aid, recovery (rehabilitative) to prepare the patient's condition ready to exercise again. According to the research of Putri et al (2014):

2) service activities at the Semarang City orthopedic hospital using a physiotherapy approach. The physiotherapy uses promotive, preventive, curative, and rehabilitative efforts. This shows that the actions taken by the Semarang City orthopedic hospital with the PhysioSET Physiotherapy Clinic in Malang are the same even though they are different in year.

Physiotherapy management at PhysioSET Physiotherapy Clinic does not use internal medicine for the treatment process until its recovery. To treat patients who experience pain and swelling, the PhysioSET Physiotherapy Clinic uses ice pack techniques. Because the PhysioSET Physiotherapy Clinic uses pure physiotherapy techniques in its treatment.

The tools used by PhysioSET Physiotherapy Clinic for the treatment of dislocation injury patients are ultrasound, infrared, kinesiology tape, electrical tens, balance pad, gymball. According to Samudro's research (2013: 14) in the case of dislocation of acromion clavícula joint dextra in MOEWARDI Regional Hospital using infrared modality (IR) and exercise therapy aimed at overcoming problems that arise. The tools used at MOEWARDI Regional Hospital are also almost the same as those used in the PhysioSET Physiotherapy Clinic in Malang.

The treatment process is carried out by the PhysioSET Physiotherapy Clinic by relieving pain after dislocation injury by using isometric techniques with the concept of contraction. In this treatment process, physiotherapy uses an instrument called electrical tens to reduce pain in dislocation injury patients. According to Fajarirawati (2017: 9) the technique carried out by physiotherapists on students of the Department of Computer Network Engineering (TKJ) at SMK Kasatrian Solo is a contract relax stretching technique. As for overstretched ligament tissue problems caused by dislocations, PhysioSET Physiotherapy Clinic physiotherapists provide stabilization exercises as well as muscle strengthening exercises around the injured area to support the joints so they don't experience reinjury. According to Budiono's research (2016: 2) the treatment measures taken by UNY's FIK Therapy Clinic, are as follows: if a dislocation injury has occurred in one of the limbs, then it will not restore joint strength and joint function as before. One of the choices that must be made to make the joints stronger again is to do therapeutic exercises such as therapy and proprioceptive neuromuscular facilitation (PNF) exercises.

For stabilization and muscle strengthening exercises, PhysioSET Physiotherapist Clinic uses an instrument called ultrasound that is useful for accelerating the stabilization of ligaments and kinesiology tape to maintain stability which is to protect the joints. According to Cai (2015: 1) kinesiology tape is one of the most common adhesive therapy tools for the treatment of injuries and performance improvement and prevention of injuries that are clinically effective in flexibility of joint movement, increasing muscle activity and increasing functional performance. Physio Clinic Physio Physiotherapist PhysioSET also uses an instrument called infrared for acute dislocation injuries. The treatment process at the PhysioSET Physiotherapy Clinic is carried out within a maximum period of two months, due to overstretched ligament problems.

After the treatment process is complete, the recovery process is carried out to prepare the patient after the dislocation injury is ready to exercise again. According to Van Dijk and Digiovani (2016: 1166) "to optimize after treatment of injuries, an appropriate rehabilitation or recovery program is needed to restore the injured tissue to return to normal". In this recovery process, PhysioSET Physiotherapist Clinic uses several phases and collaborates with physical trainers for athletes, while for non-athletes, physiotherapists provide training. The phases are divided into four parts, namely phase one, phase two, phase three, phase four. In each of these phases there are different treatments given to patients after dislocation injury. In phases one and two, patients after pure dislocation injury receive treatment from physiotherapists, while in phases three and four patients receive treatment from physiotherapists and physical trainers. In phase one the exercise is to relieve the patient's pain after dislocation injury and also to maximize the scope of joint motion. In phase two, they have used flexibility training and minimal strength training. The exercise is intended to restore and maximize the flexibility of the joints and also to strengthen the muscles in the area that has suffered a dislocation injury. According to Biswas (2019: 190) during the second phase of dislocation injury recovery using muscle contraction exercises, flexibility exercises and exercise therapy.

After passing through phase two, the patient after dislocation injury will enter phase three recovery from dislocation injury. In phase three, the exercise given by Physio Clinic Physiotherapist Physiotherapist is strength training. According to Biswas (2019: 190) "in phase three trying to regain control of muscle strength to the maximum, and during this phase three the exercise used was resistance training". After phase three has passed, the patient enters the peak phase of recovery after dislocation injury, which is phase four. In this phase four post dislocation injury patients receive treatment from a physical trainer. The training given is also adjusted to the sporting branch of the patient. The exercise in phase four is intended to prepare patients after dislocation injuries to return to sports (return to sport). After the dislocated patient has finished treatment at the clinic, he will be given a homeprograme for maximum self-recovery at home. The homeprograme given is the same as the exercise program while in the clinic. When the dislocated post-injury patient has recovered from his injury, the PhysioSET Physiotherapist Clinic physiotherapist provides a preventive measure by

appealing to keep doing the homeprograme that has been given until it has fully recovered from the injury. According to Erickson and Sherry (2017: 268) after recovery from sports injuries, an athlete must take preventative action by continuing rehabilitation on their own after recovering from an injury to help minimize the risk of re-injury.

V. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

Physiotherapy management at PhysioSET Physiotherapy Clinic does not use internal medicine for the treatment process until its recovery. To treat patients who experience pain and swelling, the PhysioSET Physiotherapy Clinic uses ice pack techniques. The PhysioSET Physiotherapy Clinic also uses tools for handling patients including kinesiology tape, electrical tens, infrared, ultrasound, balance pad, gymball.

The management of dislocated injury physiotherapy at PhysioSET Physiotherapy Clinic is getting treatment with isometric techniques with the concept of contraction and stabilization exercises as well as muscle strengthening exercises around the injured area to support the joints so as not to experience reinjury. After the treatment process is complete, the recovery process is carried out to prepare the patient after the dislocation injury is ready to exercise again. The recovery process at the PhysioSET Physiotherapy Clinic is carried out with four phases and collaboration with physical trainers for athletes, while for non-athletes the physiotherapist provides the training. In this recovery process, dislocation injured patients are given treatment or training to be able to recover from injuries (return to sport). When the dislocated post-injury patient has recovered from his injury, the PhysioSET Physiotherapy Clinic physiotherapist provides a preventive measure that is an appeal to continue to do homeprograme.

B. Recommendations

Based on the research that has been done and the data obtained, this research can be said to run smoothly and well. But there is nothing wrong if researchers want to give advice that hopefully can be useful for the development of physiotherapy. The following suggestions will be given by researchers:

1. For further researchers, hopefully get new data about the management of dislocation injury physiotherapy, so that both the physiotherapy clinic and the hospital can treat patients with a more comprehensive management.
2. It is hoped that further researchers will elaborate on basic theories aimed at broadly describing the management of dislocation injury physiotherapy.
3. For further researchers, it is expected to use more optimal data collection techniques in the data collection process.

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