

SPORTS INJURIES DURING A FOOTBALL GAME

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Abstract

Introduction: Injuries are possible when playing sports if you are a professional athlete or playing for fun. You can avoid common sports injuries by taking precautions like using the right equipment and techniques for each sport.

The main purpose of this study is to rehabilitate sports trauma as soon as possible during a football game. The main objectives that we managed to achieve through this study are:

- To be able to identify the type of trauma that occurred
- To rehabilitate the athlete as soon as possible
- To get the footballer back in the game as soon as possible

Methodology: This study is of descriptive-analytical type. The study included 4 teams (U13, U15, U17, U19) each with 20 individuals. The footballers were followed for a period of two months October-December 2021. The traumas that were taken into the study are the traumas that occurred during the sports game. Traumas were divided into three main categories: Mild, moderate, and severe trauma. The ambulance bag contains are: refreshing spray. Warming cream, anti-pain cream, intramuscular pain medication, simple compresses, elastic bandages, diazepam, adrenaline IM / IV

Results: Mild traumas cover 50% of cases and include: shoe blows, minor injuries (skin scratching, nosebleeds) / Moderate traumas cover 30% of cases and are muscle pulls, muscle contractures, patellofemoral syndrome muscular hematomas, while severe traumas involve 20% of cases and are: meniscus rupture, blows to the head, protrusion of the ankle. Rehabilitation consists of: acute phase refreshing spray, ice, immobilizations with bandages, while later massage break, stretching passive movements, active, closed, open chain exercises, stability exercises, cup therapy

Conclusions: The mild traumas are easier to treat and rehabilitate, moderate ones require more time to rehabilitate, while severe traumas are rehabilitated longer but can cost the athlete's career, but above all they are very stressful and for the medical staff.

Keywords: trauma, exercises, massage, football

1. Introduction

When playing a sports game of any kind you can experience two moments: a moment of joy because you win or at one point you can suffer some injury. Thus, compared to traditional rehabilitation after injury, sports injuries rehabilitation requires more care, a highly structured and sports-specific approach, which should prepare both the athlete and the injured tissue for the following physical and psychological demands at the highest level of sport. Injuries in sport can occur through contact or noncontact mechanisms and maybe of an acute or overuse nature. They may involve muscle, ligaments, or bone, with stress fractures being somewhat unique to sports and overuse.

Epidemiological studies have revealed no significant decrease in sports-related injuries over the past two decades, despite the heightened insight into injury mechanisms, prevention programs, and load monitoring techniques in athletes. Macro-traumatic injuries are usually due to a strong force – such as a fall, accident, collision or laceration – and are more common in contact sports such as football and rugby. These injuries can be primary (due to direct tissue damage) or secondary (due to transmission of forces or release of inflammatory mediators and other cytokines).

Micro-traumatic injuries are chronic injuries that result from overuse of a structure such as a muscle, joint, ligament, or tendon. This type of injury is more common in sports such as swimming, cycling and rowing.

The process of rehabilitation should start as early as possible after an injury and form a continuum with other therapeutic interventions. It can also start before or immediately after surgery when an injury requires a surgical intervention. Sports Physical Therapy utilized in rehabilitation, treatment, prevention, evaluation, performance, and enhancement of the physically active individual. Sports physical therapists are involved in evaluation of active and chronic injuries Plan Rehabilitation is the restoration of optimal form (anatomy) and function. A specially trained physical therapist will complete a comprehensive evaluation looking not only at the injury at hand, but also taking into consideration the underlying cause of the injury and the given sports demands.

2. The main purpose

The main purpose of this study is: Rehabilitate sports trauma as soon as possible during a football game. The main objectives that we managed to achieve through this study are:

- Be able to identify the type of trauma that occurred
- Rehabilitate the athlete as soon as possible
- Get the footballer back in the game as soon as possible.

3. Methodology

This study is of descriptive-analytical type. The study included 4 teams (U13, U15, U17, U19) each with 20 individuals. The footballers were followed for a period of two months October-December 2021. The traumas that were taken into the study are the traumas that occurred during the sports game. Traumas were divided into three main categories: Mild, moderate, and severe trauma. The ambulance bag contains are: refreshing spray. Heating cream, anti-pain cream, intramuscular pain medication, simple compresses, elastic compresses, diazepam, adrenaline IM / IV.

4. Study criteria

Inclusion criteria:

- players of the academy U13, U15, U17, U19
- players playing football

Exclusion criteria

- players younger than 13 years old
- game players older than 19 years old
- players who play other sports such as volleyball, basketball, etc.

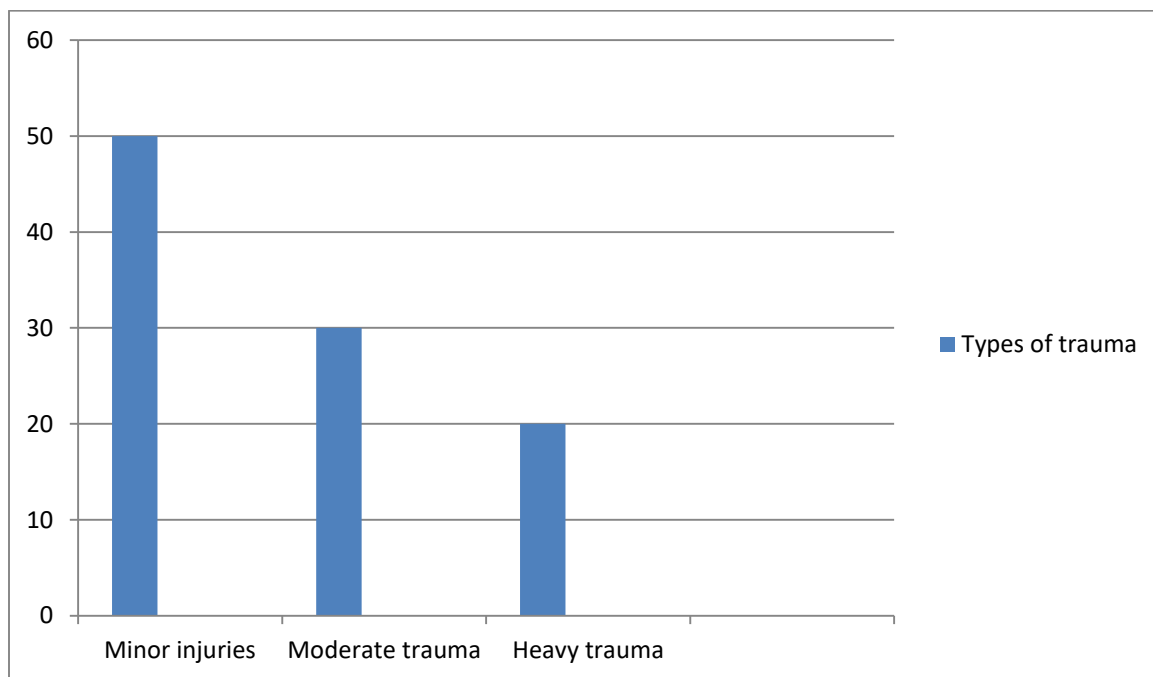
5. Analysis

To analyze the trauma, we will describe the teams one after the other

Table 1. Types of trauma

Squad	Injury	Type of trauma
U13	-3persons with contractures in the hamstring and quadriceps muscles -2 persons with first degree burns -1 person with muscular traction -5 people in pain in the pubic area	-60% minor injury -40% moderate trauma

	-1 person with eye stroke that creates an immediate hematoma	
U15	-3 persons with gracilis muscle contractures -5 persons with trigger point -3 persons with first degree burns -1 person with knee pain that radiates to the popliteal area	-60% minor injury -40% moderate trauma
U17	-1 person with a rib injury that refers to breathing problems -1 person with ligament laxity of the ankle ligaments -2 persons with second degree burns -3 people with muscle contracture	-60% moderate trauma -40% minor injuries
U19	-1 person with ankle problems -1 person with contraction of neck muscle -2 persons with traction of gracilis muscle -1 person with anterior cruciate ligament rupture	-20% heavy trauma -30% moderate trauma -50% minor injury



Graph 1. Types of trauma

Rehabilitation of trauma:

1-Contracts: The athlete is given 2 days off. A light massage is applied to release the muscular structures. Then a sports massage is applied that has a high pressure accompanied by muscle stretching to fully release the muscle.

2-Kicks to the limbs: When they are on the field, a cooling spray is applied which cools the area and reduces the pain, giving the athlete the opportunity to return to the game. In these cases, the blow is directly to the muscle and causes a direct hematoma or oppression syndrome occurs. In the first case the hematoma should fall and then we apply sports massage accompanied by jogging. Whereas in the case of oppression syndrome it requires a longer recovery phase. Apply daily light massages with gel-shaped creams to reduce pain and

gradually improve muscle tone.

3-Muscle contractions: These traumas are caused by overload during a season. They are more complex to treat. Non-steroidal anti-inflammatory drugs (NSAIDs) are initially recommended along with magnesium supplements to improve neuron motor plaques. For a period of two weeks, the athlete is given a light massage together with muscle stretching. In case we do not have an improvement, apply Voltaren accompanied by intramuscular muscular flex to relax the muscles. The athlete then begins to slowly engage on the field.

4-Ankle ligament laxity: At first the athlete takes a few days off then starts with strength exercises to strengthen the thigh and cartilage muscles. The focus is on strengthening the hamstrings and Sartorius.

5-Anterior cruciate ligament rupture: the athlete leaves the game for a long period of time that undergoes surgery and a long rehabilitation phase.

6. Results

Mild traumas cover 50% of cases and include: shoe blows, minor injuries (skin scratching, nosebleeds) / Moderate traumas cover 30% of cases and are muscle pulls, muscle contractures, patella femoral syndrome, muscular hematomas, while severe traumas involve 20% of cases and are: meniscus rupture, blows to the head, protrusion of the ankle.

7. Conclusions

After analyzing and discussing the collected data it was found that mild traumas are easier to treat and rehabilitate, moderate ones require more time to rehabilitate, while severe traumas are rehabilitated longer but can cost the athlete's career, but above all they are very stressful and for the medical staff. In addition, one must not ignore nutritional supplementation and psychological intervention, which have a major role in getting the athlete back to full fitness, along with injury-free return to sports at the same level when he was injured.

Appendix

Appendices, if needed, appear before the acknowledgment. Nomenclature, appendix, acknowledgement and references are not numbered.

Conflicts of interest

There are no conflicts of interest.

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