Review Article

Sports Injury

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RECENT TRENDS IN SPORTS INJURIES AND PREVENTIONS

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However, sports are developing at national or international level and gives healthy lifestyle at all but another side the graph of injuries increase rapidly. This study explore those injuries which are facing by an athlete at the present time. Athlete effected on physical, psychological and emotional level. Sometime athletes lose their confidence. This study presents some preventions to avoid these injuries and rehabilitation process to come back fast in game & individual events and to maintain his/her place in team and present their best performance in playfield.

Keywords: SPORTS INJURY, RETURN TO SPORT, ACL (anterior cruciate ligament), PRP (platelets rich plasma), ORTHOBIOLOGICS, TORN

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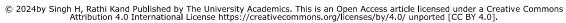
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INTRODUCTION

In today modern time\age, if sports developing than on the other hand the risk of injuries are also increasing. The growing reputation of sports world wide has made the 'sports industry' much more lucrative, like financially and as well as extremely competitive with many elite (best) professional athletes who strive for it with this, sports activities has been intensified like the physical and emotional burden of sports, increased the required training's practice program. And it exposed those who concerned in this research on a high risk of injury.

The developing popularity of the lately incepted HOCKEY, FOOTBALL and KABADDI leagues in India is evidence of a developing sports tradition in a country predominantly favoring cricket. These sports are fast paced, performed over a short time line, and often pose a high fatigue and injury risk to the involved athletes. Studies from around the world emphasize the relation between the demands of the sport and the risk of injury.

As at the national & international level sports are developing, it increases rapid adaptation of this healthy lifestyle in people. But along with this, the risk of injury is increased.

The athlete /player always have a pressure (Burden) on them to perform & win. for this, they increase the training schedule, and because of that overload they have to face injuries before or during the competition or tournament. The injuries occur because of the overload (pressure) on tissue or muscle and much quantity of mechanical energy is used beyond its maximum amount or the incorrect biomechanical movement of the muscles and another reason like aggression, emotional breakdown leads injury during competition. These injuries affect an athlete physically or mentally both.

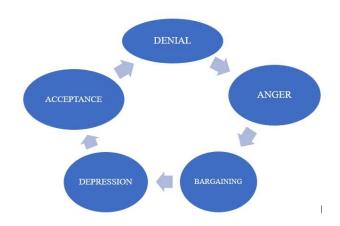
Physical effect: Lack of movement, restriction in movement, difficulty in natural movement, postural deformities etc.

Note: Recently, in FIFA World cup PANLO DYBOLA have face a torn hamstring injury which caused no movement at all. And Argentina player GIOVANI LO CELSO face a quad torn injury.

However, along with physical effects of injury the athlete also Have to face some **mental effects**,

Like: stress / depression, inability of thinking, confusion, motivation disturbance, Lack of concentration and loss confidence.

According to **KUBBLER-ROSS MODEL**, there is five stages of grief to Psychological management of injured area (DABDA). which is given **by Elisabeth Kubler-ross** in her book [on death and dying (1969)].



In modern competitive sport, injured athletes are under pressure to return to competitions as early possible, which is often a demand for both the sports person and the team management. Athletes also stand a chance of losing their place in the team due to the highly competitive scenario and naturally come under higher pressure to return.

INJURY

What is injury?

An injury is damage to your body. [its general term that refers to harm caused by accidents, falls, hits, weapons and more]

what is sports injury?

The term sports injury refers to the kinds of injuries that most commonly occur during sports or exercise.

OR

sports injuries are that occur during sports ,athletic activities or exercising.

- TYPES OF INJURY

There are three type of injury 1. **Acc. To causes**Direct injury- A direct injury by an external blow or force.

Indirect injury- The result of either an internal force, with in the body, or excessive force, from outside it. Overuse injury- Over use of a muscle or body part,

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Repetitive overloading of a structure.

2 Acc. To tissue type

Soft tissue injury - Its muscle, ligaments and tendon's injury

Hard tissue injury- Hard tissue injuries are bone fractures.

3 Acc. To duration

Acute injury- Acute injuries are conditions that have sudden onset and are of short duration.

Chronic injury-chronic injury are conditions that have gradual onset and are of prolonged duration.

- causes of injuries
 - · Improper conditioning
- No proper warm up
- Over use
- Not using the correct exercise techniques'
- Lack of nutrition
- Psychological effect
- Lack of sports facilities

INJURIES IN CURRENT SCENARIO- Most common injuries, athletes are struggling with these days.

- 01. BANKART TEAR Bankart tear is injury associated with a dislocated shoulder. It is a injury of anteroinferior glenoid labrum of the shoulder due to anterior shoulder dislocation. When humerus head slip out from the glenoid labrum and tear the anteroinferior glenoid cavity of scapula bone. (BANKART TEAR INJURY MOSTLY OCCURS DURING KABBADI)
- 02. **TORN LIGAMENT (ACL**) Torn ligament injury is one of the most common Injury of ACL (anterior cruciate ligament). It's often happened when ligament stretched or strained over then normal capacity can cause of sprain or tear.
- 03. **ANKLE STRAIN** ankle strain is Occurs when tendons and muscles of ankle stretched and tear due to any awkward side running, jumping.
- 04. **HAMSTRING SPRAIN** When the tremendous pressure is exerted on the hamstring muscles as the knee travels rapidly through the flexion extension process. When the muscle are weak or unconditioned, they often can not stretch as far as the leg do.
- 05. ACHILLES TANDONITIS -

02. The tendon is a thin, powerful tendon at the back of ankle. During play sports, this tendon can break or rupture. When it does, severe pain and difficulty in walking.

PREVENTION

- Prevention for any Person's for sports injuries is;
 First, they have to choose the sport according to their body built or according to their body capacity.
- Create a fitness plan that includes cardiovascular exercise, strength training, and flexibility. (This will help decrease your chance of injury)
- Alternate exercising different muscle groups and exercise every other day.
- Cool down correctly after exercise or support. It should take 2 times as long as your warm ups.
- Stay hydrated. Drink water to prevent dehydration, heat exhaustions, and heat stroke.
- Stretching exercises can improve the ability of muscles to contract and perform. This can reduce the risk for injury. Each stretch should start slowly until you reach a point of muscle tension. Stretching should not be painful. Aim to hold each stretch for up to 20 seconds.
- If you have a sports injury, make sure get as much as rehab (rehabilitation)as needing before restarting a strenuous activity.

REHABILITATION

1st of all use the thumb rule at the present time of injury- **PRICE**

P-PROTECTION, **R-**REST, **I-**ICE, **C-**COMPRESSION And **E-** ELIVATE.

- Orthobiologics (Stem cell therapy): Orthobiologics are natural substances aid in the
 treatment of orthopedic injuries and conditions.
 These used to improve the healing time of
 broken bones, injured muscles, tendons and
 ligaments.
- PRP (platelets rich plasma) PRP injection are gaining popularity for a variety of conditions from sports injuries to hair loss. The treatment uses a patient's own blood cells to accelerate healing in a specific area.
- PHYSICAL THERAPY Form of treatment using physical modalities (equipment)

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- to elevate pain and suffering. hydrotherapy, cryotherapy, electrotherapy, mud therapy, paraffin therapy and use ultrasound therapy.
- MASSAGE- ("To touch" or "To feel" and "To handle") The many benefits of massage may include generalized relaxation dissolution of scar tissue adhesions, and improved circulation, which may speed healing and reduce swelling from injury.
- NUTRITION Nutrition is an important component to prevent the injury and in rehabilitation process also. The human body requires energy and especially Protein and unsaturated fatty acids to compensate for inflammation. Intake of nutrients and micronutrients can play a major role to support athletes in recovery.

CONCLUSION

This study shows that if sports development has happened then along with it the chances of sports injury also increase. There is some techniques and rehabilitation process suggested in this study to stop these injuries. By follow these steps and preventions athlete can be avoided the injury and present their best performance in playfield.

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