ISSN: 2349 - 4891



International

Journal of Recent Research and Applied Studies

Perceptive Injury in Games the Task of Technology

Dr.K.Rajendran

Assistant Professor, Department of Physical Education and Sports Sciences, Annamalai University, Chidambaram, Tamilnadu, India.

Received 25th September 2014, Accepted 15th November 2014

Abstract

Advanced technology in sports has significantly narrowed the gap between world record aiders and the way the athletic achievement is perceived. Management of sport injuries plays an important role in success of sporting story of any nation. And here comes the technology at rescue. Technology helps today's sports people go faster, higher and further than before technology improves sports injuries like ultrasound therapy with help of software. It also makes it easier and more recovery of injuries in sports. The purpose of the study is to explore the influence of perceptive injury in games the duty of technology. This study also explores the new technological advancements in sports related preventing injuries, mechanism, influences, risk and causes and leading to the why injuries are mismanaged. The study is confined to the advancements of perceptive injuries in games through modern technology.

Keywords: Injuries, Games, Task, Technology.

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Introduction

Medicine is now in the hands of technology to achieve a clear improvement in imaging quality, which will not only result in a better diagnosis, but also a more effective treatment and subsequent recovery. Some of the biggest technological advances in treating sports injuries have been the use of magnetic resonance imaging (MRI) and the advancement of arthroscopic surgery. The affluence of a society may be reflected from the enthusiasm in sports. The sport is Doming all around the world now days. People are more eager and curious to know how their bodies behave during exercise and competition. Few decades back an ACL tear could proobably end your sporting career, but it is not the case now, as it may be only a season ending injury. The advancement in technology in treating sports injuries have made possible to return from deadly injuries and get back to your sport.

No pain no gain' is a concept well known to athletes and this concept is very much 'reflected in their performance in the field against the clock. Sports population is increasing day by day with each succeeding generation. Simultaneously the danger and risk associated with sports had also increased. Individual participates in sports for many different and complex reasons. Majority of them do so to promote their physical fitness and fun while others strive to achieve greater and greater. A study by (Jose & Jimenez) shows that new three-dimensional technologies applied to vie traditional ultrasound scan

Correspondence

Dr.K.Rajendran,

E-mail: drkr978@gmail.com, Ph: +9194436 51364

significantly improve the quality of imaging. The new branch of ultrasound scanning, known as intraoperative ultrasound, makes it possible to avoid some of the surgeries that were previously unavoidable when applying ultrasound-guided treatment to the musculoskeletal system.

An article published in (Bendigo, Victoria (PRWEB) on April 11, 2008) read: Chinese Olympic to Investigate Australian Technology in Sports Injury Recovery. In 1996 the Chinese Olympic team came 4th in the total medal count. In 2000 they were 3rd and in 2004 they were 2nd. Now they have a burning desire to be number 1 in the medal count on their home soil and they have left no stone unturned in their quest, including taking the latest breakthrough in injury recovery from Australia and using it against us. Snubbed by the Australian Institute of Sport and overlooked by Australian team coaches across the nation, a new method fully developed by the Elmore Oil Company for rapidly increasing the rate of recovery from soft tissue injury, is being looked at by the Chinese in their bid for fame. And the result, we all had seen. Chinese stood on top of medal tally in 2008 Olympics.

For the very purpose of study extensive reviewing and investigation was carried through the scientific literature available and discussions were held with experts, professionals, injured sports persons, physiotherapist and doctors in many part of the world.

Mechanism

Injury is the damage to body caused by mechanical stress to which it cannot adopt by avoidance, transmission or absorption. The type of stress applied decides the initial damage to the tissues. Injured tissues

Rajendran, 2014 ISSN: 2349 – 4891

can differentiate between the types stress applied to it. It can identify whether it is a direct blow or sudden stretch. Here the limitation is that injured tissue cannot identify the situation in which injury takes place. The sports injury practitioner cannot differentiate between the stress caused by road accident or injury in sports field.

Influences

If there is fracture in Tibia or Fibula, the hemorrhage will be much more than in a person who gets similar injury on road side. The means that type of activity greatly influence secondary symptoms of injury. At this point physical fitness becomes very important and crucial. It not only influences the secondary effect of injury but also effect the recovery process.

A hematoma is much bigger in athletes with high blood flow in exercising limbs but the very process of training prepares the limb for rapid absorption of extravagated fluid and hence hematomas are rapidly absorbed in fit individuals than in sedentary.

Biomechanical inadequacies multiply the effects of injury in sportsperson than in the sedentary person. For e.g. Long distance runner who have torsion of tibia and excessively pronated feet, which on day-by-day basis may cause no problem but under the stress of running such faulty biomechanics make the adsorption of otherwise reasonable stress impossible and breakdown occurs. Generally sedentary and middle active individual may cope up with injuries but such injuries would significantly and adversely affect the performance of an active sports person of an elite class.

Risk and Causes

The greater the number and intensity of training session and competitions, the greater is the risk of injury. Moreover in professional sports there is additional pressure on sports persons to perform irrespective of minor injury or illness. 'No play no pay' - due to this concept there is additional financial pressure on athlete to perform. This develop different attitude of sports person towards their injuries and sports. Faulty technique and foul play is another major factor, which propagates the injury.

King (1983) had described second injury phenomenon. It occurs when athletes sustain a minor injury and continues to play instead of rest thereby making h second unrelated possibly more severe injury. Classifying the injuries according to sport may be useful but this r fixed ideas as to what may or may not occur in given sport. This often being missed because they are not regarded as being the chare question. What is needed in order to understand injury is clear cone of injury?

Proper Diagnoses: Still Remain a Concern

Injured sportsperson receives scant attention and sympathy $b \setminus b$ uncaring attitude invariably prejudices correct history taking and proper. The attitude "go away and rest it" is still prevalent and may lead to disaster are treated well and minor ones remains inadequately

diagnose pathologists are misdiagnosed and consequently mistreated.

Another example is complete rupture of Achilles tendon. Doctor difficulty in diagnosis of this condition, yet it is frequently missed a referred to physiotherapist for muscle pain. Frequently the diagnosis becomes immediately apparent from the injury occurred. That is accurate description of incident makes the d of overuse injury a clear description of patient's training programme to what is going wrong. Lack of proper natural history may lead to misdiagnosis. E.g. sciatica is misdiagnosed as chronic hamstring strain very frequently. Hence clinician must ma of suspicion. It is important for attending clinician to make every effect to reach accurate diagnoses and be aware of usual natural history.

Some Serious Concerns

According to (Yang et.al 2012) overuse injuries found most often that involve long training sessions or where the same movement is times make up nearly 30 percent of all injuries sustained by collegiate majority of overuse injuries (62 percent) occurred in females athlete study published in the current edition of the Journal of Athletic Training the national athletic Trainers' Association scientific publication.

Overuse injuries may play not only physical challenges but also psychological ones that could significantly affect an athlete's recovery and performance," said study co-author Tracey athletic trainer at Michigan State University and a member of the Department of kinesiology. Latest concern is injury to cheerleaders. There is report suggest that large number of injuries is happening to cheerleaders than before.

Why Injuries are mismanaged?

Over the years ultrasound therapy is still used in haphazard manner by those who have only sketchiest idea of its effects. The therapist may some idea of output from the sound head but has no means of determining the dose at tissue level. Histological examination of ultra-structure of tendon remove at surgery for chronic Achilles tendon pain has indicated significant degree of damage to the tissue.

Another form of treatment is cryotherapy in the form of cold-water bath, frozen peas, simple ice Bags etc. The risk to the integrity of peripheral nerves in the area of cooling has been clearly defined. There was evidence of prolonged impairment of function after treatment with cold. But still we are using these kinds of modalities over the years without critical reappraisal.

Another form of treatment frequently used in infection of local anesthetic and steroid. The full effects of this type of treatment are also uncertain. There are many instances recorded in the literature about damaged caused by such injections both in experimental and therapeutic models.

Reasons for Mismanagement of Injuries

Injured sports person wants to return to training

Rajendran, 2014 ISSN: 2349 – 4891

and competition very early. They want to be 110% fit and they want it yesterday. Doctors were under pressure from club managers/ coaches because injured player in question has considerable drawing power for spectators. This compels doctor to take risk and cut corner in treatment so as to allow rapid resumption to activity. Generally doctors are agents of club paid for his services. Discharge of duties towards club therefore may conflict with best interest of the injured. Sound grasp of fundamental anatomy and biomechanics is required for proper interpretation of case, so to be understanding of sports in question. Experience of sport and knowledge of rules and regulations is of advantage. Because in many cases injury occurs due to faulty biomechanics technique in technical events and correction of that becomes important part of injury management. Doctors should be in position to advice in and referred for expert guidance. Doctors everywhere have to understand that do not have all the answers. Sporting injuries requires multidisciplinary approach. Few doctors have knowledge and experience to treat every pull, strain, break, and tear.

Conclusions

- 1. Listen and understand your body, your body speaks so never underestimate any injury.
- Even with technology, you can't rush your body healing, because there's the risk of causing other problems."
- 3. In the absence of proper rehabilitation, each time you're more susceptible to injury again.
- 4. Minimize the danger in sports.
- All responsible governing bodies in sports should ensure to injury by making appropriate changes in rules with an appropriate programmers involving

- participants, official and coaches.
- Medical team would have to possess substantial knowledge and has to established close relationship with participants, coaches, officials and administration.
- 7. Players should try to protect him/herself and return to action fully fit.

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