

Running Head: SPORTS TRAUMA

First Aid and Sports Trauma

DO NOT COPY-SAMPLE(PAPERS JUNCTION)

## First Aid and Sports Trauma

### *Introduction*

In today's competitive world, every individual faces tremendous pressure in terms of making himself fit for the athletic events and other sporting occasions. When players went on the field during matches, the risk of injuries stays with the sporting entities. The interesting fact about sporting injuries is that such medical emergencies have no alarming situations or they don't happen in everyday life. The medical experts who travel with the players during playing events always strive to secure the players from injuries and other related concerns. In this regard, medical experts create "*First Aid for Athletes*" to overcome with sports trauma. Players during the match faced severe injuries such as muscle strains and fracture which force them to leave the event without full participation (Emerich & Kaczmarek 2010). Therefore, medical staff through First Aid gives assistance to the participating player which helps them in overcoming injuries and perform better in sporting games. The guide from medical panel also upgrades the fitness level of the players by delivering special tips regarding health concerns in the domain of sports. Further, this study through reflective essay explores "*First Aid and Sports Trauma*" consequences which held with players in practical life.

The Medical staff during the sporting events offers friendly information to the players which allows them to perform effectively, else they motivate them to achieve desired objectives (Biagi et.al 2010). Previous study suggested that players who are most fit as compared to frequent injured athletes, deliver their best when they are on the field.

### ***Gibbs Reflection Model***

#### *Description*

In physical education and sports, during training and competition, despite the most careful precautions are possible or that the injury. The reasons for this are many: the error in the method of employment, breach of the competition rules, weather and hygienic conditions, inattention athletes, failure to comply with medical requirements. In the struggle with injuries should involve all coaches and athletes in order to avoid serious consequences in health and athletic performance (Brunker 2012). In addition to injuries of the athletes, there may be a variety of disorders of vegetative-vascular system: fainting, shocks, collapses, psychoneurotic disorders. When syncope (brief loss of consciousness), you must undo the clothes to improve blood flow to the head, to give more fresh air and smell the ammonia. Various injuries arise from direct impacts, by using methods of force during martial arts opponents with their close contact. I think that, frequent injuries of shells and sports equipment are of major type which could harm the players severely.

First aid for injuries lies in the irrigation stream of ethyl chloride bruised place from a distance of 40-50 cm from the treated skin area (ice, snow, cold running water). All bruised face irrigates before its whitening (Emerich & Gazda 2010). Then, apply a pressure bandage which could release the pain and assists the player in cure procedure. Injuries occur in the joints of athletes of various specializations. Most often subjected to this injury knee, ankle, elbow joints. Sport and the overall ability to work in these cases terminated for a substantial period and first aid is the same as for any other injury. Bruises hand and fingers accompanied by a small swelling, limitation of movement. First aid is the same as for soft tissue injuries. For the rest his

bruised wrist in a cast resort in rare cases. When bruises finger it's best to use Adhesive bandages to overcome with pain effects.

### *Feelings*

Injuries of the elbow joint are expressed in pain, swelling, coming immediately after the injury, and increases with each attempt movement in the joint. First Aid is in the elbow area irrigation jet ethyl chloride (ice, snow, etc.) and applying a pressure bandage which works well as a First Aid. Further, I feel that concussion of the brain is divided into three levels: mild, moderate and severe. Mild concussion - characterized by short (3-5 minutes), loss of consciousness or blackout. Typical complaints are headache, dizziness, nausea, tinnitus, pain in the eyes, worse in bright light, noise. A major role in reducing sports injuries is the observance of the basic principles of injury prevention: prevention of chronic overload, overvoltage, underestimation of external and internal factors, the state of fatigue and exhaustion, changes in the functional state of individual systems of an athlete-related breaks in employment or disease, the tendency to muscle spasms and vessels, insufficient physical training athlete, failure to comply with the rules of medical control (Raouf et.al 2012).

In the prevention of sports injuries plays an important role self-athlete, i.e. observe changes in his state of health (subjective assessment of their condition). They include fatigue, unwillingness to fulfill the training load, bad mood, as a result of overtraining. Objective signs of overtraining are: heart rate, weight fluctuation, sweating, blood pressure data, spirometry and dynamometry (). Particular attention should be paid to micro trauma that do not cause violation of athletic performance, but their repetition may have more serious injuries. Very often their micro trauma at maximum load and forced excess physical capacity athlete's body. Damage to the muscles are quite common when doing any sport. These injuries are caused by abrupt, forced

movements, exceeding the limits of elasticity of the tissues. Any damage to the integrity of muscle accompanied by a sharp soreness, bruising value resulting in the injury site, is quite different. Sometimes it can be limited, and sometimes spilled, with the detachment of tissues.

### *Evaluation*

First aid in case of muscle damage requires local application of cold. When complete break muscles necessary hospital treatment. Partial rupture - conservative treatment (novocaine blockade, bandage with ointment Vishnevsky, etc.). The strength of the damaged muscle is restored usually 1.5 - 2 months completely. First Aid in all cases of damage is to use the same tools as for bruises. In order to overcome with severe pain, medical help an athlete is in the hospital. Rupture of the biceps tendon is observed in athletes after 30-40 years, and there is, as a rule, with a sharp reduction of the biceps during heavy lifting arm, bent at the elbow. When the tendon tear or break an athlete feels a sharp pain, and sometimes hear the crackling. Most often, there are dislocations of the shoulder joint in the fall on the shoulder of the athlete. First aid to the victim is the imposition of headscarves to rest the limb and support him in hospital for reduction of dislocation (under anesthesia) (Sulheim et.al 2011). First aid for burns, boils down to handling the burnt surface with alcohol and applied to her neutral fat layer. In order to avoid the development of intoxication suffered helpful to drink plenty.

Sports Traumatology includes a range of issues that must be addressed as a doctor and nursing staff. This determination of the causes of sports injuries, prevention of this type of damage, as well as first aid (Vergotine & Govoni 2010). Equally important are restoration activities that nurses must carry out the athletes from injury. Therefore, nurses must before each

class to find out all complaints to certain deviations in the health of the athletes and timely release them from training. This allows you to reduce sports injuries, and consequently, to preserve the health of thousands of people involved in sports and physical education. For injury prevention should be widely involve the administration, coaching and teaching staff of the sports complexes, schools, pioneer camps, and so on. Furthermore, it should organize competitions for the best playground, swimming pool and other sports facilities. Every sport has certain types of injuries (Brullmann et.al 2010). Therefore, below we give a description of injuries, depending on the kind of sport that will help orient the assistant at the first aid to athletes and those engaged in physical activity.

The amount of first-aid determined by the nature and localization of lesions. The most frequent injuries are head injuries, concussion, fractures of the nose and lower jaw, cut the skin in the brow ridges. When a person is bleeding bruises in the subcutaneous tissue of the zygomatic arch, there is swelling of one or both halves of the face and periorbital tissue. When providing first aid to the damaged area is applied cold (ice pack) or conduct irrigation chloroethyl, analgesic (miosprey), rubbed ointment to prevent large swelling and bleeding, as well as to reduce pain.

### *Analysis*

Vertebral fractures are quite common, mainly in the violent collision. In place of the fracture observed swelling, palpation marked local tenderness and muscle tension. The victim is laid on a stretcher in a horizontal position, it is better on the stomach, and is sent to the hospital immediately. For external damage to the internal lateral ligament of the knee joint in the area of

the inner surface of the knee joint is determined by local pain, swelling in the course of the internal ligament; in joint mobility is limited (Frontera et.al 2011). When providing first aid produce irrigation chloroethyl or analgesic, applied an ice pack or rubbed knee or apply a pressure bandage and bus. In order to proceed with the treatment, you need to present any pathological changes occur in the damaged tissues. When trauma of muscles, tendons, ligaments initial reaction occurring at break capillaries located around these structures, which quickly spread to other tissues, increasing the injured area. This initial stage just leads to a local inflammatory reaction, the degree of which depends on the duration of the recovery process. Inflammation in the tissues appear formation of edema, fever and local redness, pain and dysfunction. All of this initial reaction to tissue injury, and our task at this stage would be to reduce and change the process so as to direct its effects for the benefit of the athlete.

In this case, 48 hours begins the regeneration phase, in which special cells - macrophages penetrate the damaged area and digested with enzymes remains of other dead cells, fibroblasts begin to produce protein - collagen needed to repair the tissue cells (Flegel 2013). This process can take 6 - 8 weeks prior to the remodeling phase, where collagen deposition finally reduced fiber structure, forming a scar, the properties of which, unfortunately, all the biomechanical properties of the intact areas will give way muscles or ligaments. That is why, as correctly rendered treatment, especially in the first few days after injury, the time depends on the internal hemorrhage, hematoma size, the duration of the inflammatory response, scarring and other things that affect the process of recovery and the prevention of re-injury.

### ***Conclusion***

After in depth analysis on this respective domain, I have concluded that knowing the specifics of sports injuries will allow paramedics correctly and in a timely manner to provide first aid to the victims of the physical culture and sports. It is necessary to pay special attention to the organization of first aid during sports activities pupils in the winter and summer vacations. Nurses serve sports and public events in stadiums, sports grounds, swimming pools, gyms and pioneer camps. They are in the immediate vicinity of the damage. At the same time, they serve athletes involved in different kind of sports, i.e. receiving specific in nature and location of the injury. Nurses provide the first stage of medical aid to victims of sports injuries. Each medical office should be a set of tools for emergency medical first aid (Bali et.al 2013). The composition of the kits includes: hydrogen peroxide, chloroethyl, brilliant green, iodine, bactericidal plaster and dressings etc.

Prevention of sports injuries is one of the important problems in the work of paramedics. A powerful factor in the prevention of sports injuries is health education, expanding the knowledge and skills of athletes, coaches and other people working in the sport, which also is aimed at reducing sports injuries. This includes the monitoring of places of sports and physical education - for sports complexes, swimming pools, sports facilities in the sports and recreation and Pioneer camps.



## References

- Biagi, R., Cardarelli, F., Butti, A.C. and Salvato, A., 2010. Sports-related dental injuries: knowledge of first aid and mouthguard use in a sample of Italian children and youngsters. *European journal of paediatric dentistry: official journal of European Academy of Paediatric Dentistry*, 11(2), pp.66-70.
- Brukner, P., 2012. *Brukner & Khan's clinical sports medicine*. North Ryde: McGraw-Hill.
- Brüllmann, D., Schulze, R.K. and d'Hoedt, B., 2010. The treatment of anterior dental trauma. *Dtsch Arztebl Int*, 108(34-35), pp.565-70.
- Emerich, K. and Gazda, E., 2010. Review of recommendations for the management of dental trauma presented in first-aid textbooks and manuals. *Dental traumatology*, 26(3), pp.212-216.
- Emerich, K. and Kaczmarek, J., 2010. First aid for dental trauma caused by sports activities. *Sports Medicine*, 40(5), pp.361-366.
- Flegel, M., 2013. *Sport first aid, 5E*. Human Kinetics.
- Frontera, R.R., Zanin, L., Ambrosano, G.M.B. and Flório, F.M., 2011. Orofacial trauma in Brazilian basketball players and level of information concerning trauma and mouthguards. *Dental traumatology*, 27(3), pp.208-216.
- Raof, M., Zaherara, F., Shokouhinejad, N. and Mohammadalizadeh, S., 2012. Elementary school staff knowledge and attitude with regard to first-aid management of dental trauma in Iran: a basic premise for developing future intervention. *Dental Traumatology*, 28(6), pp.441-447.

Sulheim, S., Holme, I., Rødven, A., Ekeland, A. and Bahr, R., 2011. Risk factors for injuries in alpine skiing, telemark skiing and snowboarding—case-control study. *British journal of sports medicine*, pp.bjsports-2011.

Vergotine, R.J. and Govoni, R., 2010. Public school educator's knowledge of initial management of dental trauma. *Dental Traumatology*, 26(2), pp.133-136.

DO NOT COPY-SAMPLE(PAPERS JUNCTION)