



Elbow injuries in throw sports combating risk factors & preventive measures.

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Abstract

This paper examines the importance of treating risk factors linked with elbow injuries in throw sports. Throw sports not only are becoming popular but are often linked with regular injuries. Baseball and other throwing sports put tremendous stress on the shoulder and elbow. But the role of a coach is very high because only he can elevate the morale of the player & help him recover from his injuries within a time format . But elbow injuries are more distractive as a player loses his self-esteem & starts falling into depression. Prevention of injuries is the best option and can be fostered by using proper mechanics, strengthening exercises, and closely monitoring pitch counts by a coach . This paper analyses elbow injuries in throw sports & focuses on the need for a strategic policy framing to support players.

Key words:elbow injuries, throw sport s. role of a coach,

Introduction

These days more athletes love to play volley ball, basketball, softball, tennis, golf, cricket, hard ball bowling, baseball etc there have been severe elbow injuries being recorded. Sports Medicine specialists attend more elbow and shoulder pitching injuries. (Tennis elbow – treatment strategies National center for bio technology information 2008).

The classification-

There are two common shoulder problems of injury they are rotator cuff injury & injury to the shoulder instability . The rotator cuff is composed of four large muscles that extend from the scapula (shoulder

blade) to cover the shoulder joint. These muscles are extremely important for shoulder strength and for holding the shoulder joint in the correct position. Frequent throwing can irritate the rotator cuff or its bursa. A pinching of the bursa and rotator cuff can occur during throwing, especially if the cuff muscles are weak or tired, or if the shoulder has instability. Treatment for shoulder irritation most often includes rehabilitation exercises designed specifically for throwers, a reduction in throwing, and an analysis of throwing mechanics. On occasion, if all other treatments fail, surgery can remove inflamed bursa and create more room for the rotator



cuff tendons.(Tennis elbow – treatment strategies National center for bio technology information 2008).

Labrum of the shoulder- Another common shoulder ailment that can lead to surgery involves the labrum of the shoulder. The labrum is the rubbery cartilage "bumper" of the shoulder socket. The force needed to throw hard and repetitively stresses the shoulder. This can damage the labrum if it tears away from the socket. These tears cause popping, clicking, pain, and the feeling of looseness in the shoulder. Rehabilitation may improve symptoms, but surgery is often needed to repair the tears. A minimally invasive procedure repairs the labrum through small incisions around the shoulder. (Champ L Baker -Operative treatment of Elbow injuries Springer publication 2001).

Improper throwing mechanics-The most common elbow problems are usually caused by improper throwing mechanics. Throwers often develop muscle and tendon swelling and irritation on the inside of the elbow. This generally responds to rest, icing, and improved throwing mechanics. (Champ L Baker Operative treatment of Elbow injuries Springer publication 2001).The goal is to return athletes to their desired levels of activity. However, the significant damage that means surgery also means significant recovery time—several months to a year—before the athlete can return to the sport. Prevention is best and can be fostered

by using proper mechanics, strengthening exercises, and closely monitoring pitch counts and how much throwing the athlete are doing. (Tennis elbow – treatment strategies National center for bio technology information 2008).

Baseball and other throwing sports put tremendous stress on the shoulder and elbow. As play more athletes more baseball and softball at younger ages, Sports Medicine specialists see more and more elbow and shoulder pitching injuries. The most devastating of these is a torn ulnar collateral ligament of the elbow (also known as the medial collateral ligament). Often this serious injury needs elbow ligament reconstruction known as a "Tommy John" procedure as in America . Ulnar collateral ligament UCL) tears can start slowly as an elbow sprain and progress steadily, or can happen all at once. Ulnar collateral ligament tears result in pain on the inner side of the elbow with throwing, and difficulty controlling the pitch. When the symptoms are mild, rest and medication may take care of the problem. However, if the athlete is unable to pitch due to the pain the "Tommy John" operation is needed.

Shoulder injuries Throwing sports put tremendous stress on the shoulder and elbows. Shoulder injuries also plague pitchers and other throwers. The most commonly injured structures are the capsule/ligaments, rotator cuff, and labrum. Often the rotator cuff can be



strengthened to compensate for the injury, but sometimes the ligaments are too loose or there is a torn labrum and surgery is necessary. Throwing athletes often develop pain in their shoulder or elbow. Most often the problem will resolve without surgery. But sometimes surgery is necessary. The key is to determine who has a good chance of getting well without surgery and who does not. Players at different ages will have different issues. (Tennis elbow – treatment strategies National center for bio technology information 2008). When taking care of throwers and their injuries, knowledge of baseball and the mechanics of pitching helps. Treatment for injuries in the elbow begins with a short period of rest . If sports persons can take a brief period of rest then the injuries can be quieted .

Additional treatment options

1. Physical therapy specific exercise can restore flexibility and strength.
2. A rehabilitation program directed by doctor or physical therapist which would lead to gradual recovery
3. throwing mechanics can be evaluated in order to correct body positioning that puts excessive stress on the elbow hence a change of position can restore wellness in elbows.
4. a change of sport can restore good health this also helps in

avoiding repetitive stresses on the elbow

5. This also provides relief as mind becomes relaxed.
6. drugs like ibuprofen & naproxen reduce pain & swelling These are some of the non surgical treatment methodologies

Surgical treatments

1. But there are surgical treatments such as Arthroscopy where a small camera is inserted into elbow joint & doctor works on it. Likewise elbow injuries can be treated with UCL reconstruction method this is ligament reconstruction. some ligaments are so severe that they cannot be stitched. Hence they are reconstructed. Here the torn ligament is replaced with a tissue graft This acts as a scaffolding for anew ligament to grow on.
2. elbow is made up of bone cartilage ligaments& fluid muscles & tendons help the elbow joint move. when any of these structures is hurt then elbow pains & problems arise.
3. The anterior interosseous nerve is a branch of the median nerve just above the inner elbow. Symptoms include difficulty moving the wrist with weakness in the middle fingers with pain in the upper forearm or elbow.
4. Injury to the Auxiliary nerve usually occurs as a result of a direct impact to the outer arm.



Numbness over the outside of the shoulder and difficult raising the arm out to the side may be experienced. Over time the deltoid muscle wastes.

Conclusion

Elbow injuries should not be neglected. Players should be advised to engage in sufficient warm up exercises, post throwing sessions pay attention to their body limitations. Coaches should help players to recover from injuries with affirmative suggestions. Confidence building should be the main motto. Support from sports psychologists might help. Resting, icing, compressing & elevating are the simple first aid techniques for elbow injuries. But the role of a coach /master trainer / personal trainer / sports club owner / team manager is very high because only he can elevate the morale of the player & help him recover from his injuries within a time format. Prevention of injuries is the best option and can be fostered by using proper mechanics, strengthening exercises, and closely monitoring pitch counts by a coach. He can take the supportive help from a sports psychologist to insert self-confidence & self-esteem building before the player falls a prey to hopelessness & gloominess.

References

1. Champ L Baker Operative treatment of Elbow injuries Springer publication 2001

2. Elbow injuries - Med plus Medical Encyclopedia 2010
3. Sharma J.P.-Sports dictionary , Khel sahitya Kendra new Delhi 2009
4. Sharma . J.P. – Exercise physiology & sports- Khel sahitya Kendra new Delhi 2009
5. Tennis elbow – treatment strategies National center for bio technology information 2008
6. Elbow pains – Psycho therapy for elbow pains 2010