SUMMARY

The shoulder plays an important role in most activities of the daily life and in most sports. Some of these sports require a range of motion more than usual thus making the individual more prone to shoulder instability.

Glenohumeral instability is the inability to maintain the humeral head centered in the glenoid fossa. (Matsen et al 1994).

A complex interaction between static and dynamic factors maintains GHJ stability. Both factors function to allow maximum GH rotation while limiting excessive translation of the humeral head on the glenoid (Carr 1996, Warner and Boardman 1999).

The pathoanatomy that can contribute to anterior shoulder instability includes Bankart lesions, bony Bankart lesions, capsular injury, excessive capsular laxity, Hill-Sachs lesions, rotator cuff and subscapularis muscle injuries, glenoid fractures, and glenoid dysplasia. (Gill and Zarins 2003).

The most common complication following anterior glenohumeral dislocation and instability is the recurrence of the instability

Diagnosis of traumatic glenohumeral instability entails a detailed history taking, careful clinical examination (Protzman 1980, Rowe and Zarins 1981, Silliman and Hawkins 1993, Warme et al 1999) and radiological examination including CT and MRI (Rockwood et al 1996, Bradely et al 2003, Young et al 2005).

Successful treatment of anterior instability of the shoulder requires a balance between restoring joint stability and minimizing loss of glenohumeral motion. The choice of treatment should be individualized on the basis of the patient's occupation and level of participation in sports, as well as on the degree of instability of the shoulder. (Paxinos et al 2001,Gill and Zarins 2003).

In this study the modified Boytchev procedure was used for surgical treatment of 35 patients with traumatic recurrent dislocation of the shoulder.

Regarding the incidence of shoulder pain that was prevalent in a great percentage of patients preoperatively (68.6%), there was a great reduction in its frequency postoperatively (22.9%) regardless the type of activity exerted by the patients.

The degree of shoulder stability achieved by this technique was greatly evident, compared to the marked instability encountered preoperatively in all patients. The percentage of stable shoulder post operatively was 77.1% compared to 0% preoperatively.

The range of shoulder motion also showed remarkable improvement post operatively and this can be explained by the improved stability and the decreased postoperative pain.

Using the modified Boytchev procedure in treatment of recurrent traumatic anterior shoulder instability have many advantages as the procedure is biomechanically sound, simple, less time consuming with minimal blood loss, doesn't need special instrumentation or special surgical experience and the last but not the least advantage is that it

allows almost immediate resumption of shoulder motion and doesn't lead to residual loss of shoulder motion on the long run.

In our series, there were eight patients who had postoperative recurrent instability; all of them were involved either in heavy duty jobs or in sports activity. They all sustained the recurrence after joining their jobs or returning to their preoperative level of sporting activity. Those patients also were noted to have preoperative weak muscle power and excessive limitation of shoulder motion.

The procedure has a relatively high recurrence rate especially in patients who are involved in sport activities or heavy manual work that is why this procedure is not recommended in this group or may be combined with on of the anatomical repairs to reinforce the reconstruction.