

We reviewed 200 athletes who had undergone arthroscopic shoulder examination due to pain during sport practice. We found 17 (8,5%) type V SLAP lesions described by Maffet. This lesion is marked by the desinsertion of the superior to inferior glenoid labrum portions, jeopardizing the function of the tendon of the long head of the biceps muscle and the glenohumeral ligaments, which are structures involved on the joint stability. Sixteen (94%) of the patients presented with anterior shoulder instability. The arthroscopic technique is used on the treatment of these lesions, giving access to the superior labrum, what is not possible with the classic open procedure. Two patients had undergone open surgery previously, and had recurrence of shoulder dislocation. They were submitted to arthroscopic examination and showed healing of the inferior portion of the labrum that was previously repaired, but presented the superior lesion that was not diagnosed on the first surgery. The superior lesion was repaired arthroscopically. The correct diagnosis and treatment of the type V SLAP lesion associated with anterior instability is best accomplished with the use of arthroscopic technique. This lesion is frequently associated with anterior instability and has to be accurately diagnosed and treated to allow the athlete to return to sport practice.

Paper #14 The Reliability Of MR-Arthrography In Patients With Anterior Shoulder Instability. *Pol E. Huysmans, Presenter, Onze Lieve Vrouwe Gasthuis (OLVG), Amsterdam, Netherlands, Victor Van der Hulst, Amsterdam, Netherlands, Henk-Jan Van der Woude, Amsterdam, Netherlands, J.W. Willems, Amsterdam, Netherlands*

Purpose: The MR-arthrography of the shoulder is the imaging modality of choice for patients with anterior shoulder instability. To investigate the reliability of the MR Arthrography we compared the outcomes of the MR-arthrography with those from the shoulder arthroscopy.

Method: 22 MR-arthrograms of patients with anterior shoulder instability were reviewed in consensus by 2 radiologists. Labrum, glenohumeral ligaments, rotator cuff, cartilage and bone defects were scored for both MR-arthrography and arthroscopy. The radiologists were not informed about the results of the arthroscopy. The data from the MR-arthrograms were compared with the data obtained from videotapes of the shoulder arthroscopies.

Results: In all 22 cases the anterior labrum lesion was seen on the MR-arthrography (sensitivity 100%). It was not possible with the data from the MR-arthrography to distinguish between the different types of labrum lesions. Lesions from the superior labrum (SLAP) were diag-

nosed with a sensitivity of 50% and a specificity of 100%. Rotator cuff pathology was present in 6 cases, 5 times it was recognized on the MR-arthrography. There were 5 false-positive findings of cuff-pathology on the MR. MR-arthrography identified the SGHL, MGHL and the anterior band of the IGHl with a sensitivity and specificity of respectively 100% and no true-negative findings, 88% and 50%, 93% and no true-negative findings. The assessment of the quality of the gleno-humeral ligaments with the MR-arthrography did not correspond with the quality and condition found at surgery. All Hill-Sachs lesions (21) were scored by the radiologists, they could not accurately differentiate between a deep (bone) and shallow (cartilage) defect. The specificity (100%) of the MR-arthrography for determining abnormalities of the cartilage of the humeral head or the glenoid is much higher than the sensitivity (17-24%).

Conclusion: MR-arthrography of the gleno-humeral joint is an excellent method for determining anterior labrum lesions. More subtle information about the labrum lesions or the conditions of the gleno-humeral ligaments is difficult to obtain with MR-arthrography. Arthroscopy of the shoulder is still the gold standard for determining shoulder pathology in patients with anterior shoulder instability.

Paper #15 Significance Of Postoperative Arthro MRI In Predicting 5 Year Results Of Arthroscopically Treated Recurrent Shoulder Dislocations. *Franz Landsiedl, Presenter, Orthopädisches Spital Wien-Speising, Vienna, Austria, Nicolas Aigner, Vienna, Austria, Matthias Wlk, Vienna, Austria, Thomas Motycka, Vienna, Austria, Christian Krasny, Vienna, Austria*

Aims of the study: Is it possible to predict the 5 years results of arthroscopically treated recurrent shoulder dislocations by performing a postoperative Arthro MRI?

Material and Methods: 30 patients were included in this prospective study. 27 unselected patients with post-traumatic instability were treated using a single or double tunnel transglenoidal suturing technique. In 3 non traumatic patients an arthroscopic in-in-technique with capsular plication and attachment to the intact anterior labrum was performed. In the posttraumatic patients the quality of the labrum ligament complex (LLC) was graded as perfect without any gap or good with minor gaps between glenoid and LLC. Furthermore a capsular width quotient dividing the posterior by the anterior capsular width was calculated. All patients were reevaluated clinically 19 months (range 12-32 months) post-operatively. A second follow up examination was done

63 months (range 51-73 months) postoperatively. Redisllocations and resubluxations were graded as failures.

Results: First follow up: 3 failures, second follow up: 8 failures. All three non traumatic patients showed a perfect attachment of the plicated capsule to the anterior glenoid. There was one failure. Transglenoidal technique: Perfect reattachment without any gap: 11, failures 2. Reattachment with minor gap: 14, failures 4 (difference n.s.). Unclear situation: 2 failure 1. Capsular width quotient in stable patients 1,82 and in unstable patients 1,69 (difference n.s.)

Conclusion: According to the results of this study it is not possible to predict the 5 year stability of arthroscopically operated recurrent shoulder dislocations by an Arthro MRI performed 6-8 months postoperatively.

Paper #16 MRI Findings In Successful Arthroscopic Bankart Reconstructions. *Guillermo R. Arce, Presenter, IADT, Buenos Aires, Argentina, Pablo Lacroze, Buenos Aires, Argentina, Santiago Butler, Buenos Aires, Argentina, Juan Pablo Previgliano, Capital, Argentina, Enrique Pereira, Capital, Argentina, Daniel Alonso, Capital, Argentina*

Purpose: To evaluate the MRI postoperative findings, the accuracy of arthroscopy for labrum relocation and its correlation with the clinical outcome.

Methods: Twenty-two patients (22 shoulders) were available for a clinical and unenhanced MRI evaluation after arthroscopic Bankart repair. During the surgical procedure great care was taken to relocate the labrum over the glenoid edge. With a mean postoperative follow up 42.3 months a blinded clinical assessment with The Constant and Murley Functional Rating and the UCLA Shoulder Rating Scale was performed. The MRI images were evaluated by an experienced musculoskeletal radiologist. The appearance of the labrum was graded as over the glenoid edge (type1), at the same level (type2) or under the edge of the glenoid (type 3). The labrum images without contact with the glenoid bone were considered type 4. Type 3 and 4 were considered non-successful reconstructions.

Results: Twenty patients obtained a good or excellent clinical result (Constant 80-100)(UCLA 28-35). In this group of patients the MRI showed accurate labrum relocation with type 1 or 2 labrum reconstruction in all cases except one. Two patients were not satisfied with their outcome due to instability symptoms and pain. One of them had a type 3 labrum location and a type 4 was shown in the other.

Discussion and Conclusions: The findings of our study demonstrate that there is a high correlation between the arthroscopic labrum repair over or at the edge

of the glenoid and the satisfactory results. The aim of any arthroscopic reconstruction should be relocate the labrum at the same level or over the glenoid rim.

Paper #17 Arthroscopic Shoulder Stabilization With Suture Anchor Technique In Rugby Players. *Mario Victor Larrain, Presenter, Argentine Rugby Union and Arthroscopy Sport Injuri, Buenos Aires, Argentina, Hugo Montenegro, Buenos Aires, Argentina, David M. Mauas, Cap Fed, Argentina, Cristian Collazo, Capital, Argentina, Nicolas Carrasco, Buenos Aires, Argentina*

Purpose: The purpose of this study is to evaluate the shoulder stabilization in acute and chronic dislocation, mechanics of injuries, surgical findings, types of lesions and results with arthroscopic suture anchor technique in this very controversial topic.

Material and Methods: In a prospective study from September '96 to October '00, on 119 rugby players with traumatic anterior shoulder instability an arthroscopic procedure was performed. 93 cases were treated with suture anchor technique performed by the senior author.

Exclusion criteria:

- bone defects hill-sachs > ?, glenoid rim fx > = 25% (inverted pear) 16 chronic cases
- big capsular redundancies with inadequate quality of tissue 2 cases
- previous surgery 2 cases
- hypotrophic varieties of capsulolabral complex 2 cases
- impingement and rotator cuff tear 1 case
- acute humeral GHL detachment 1case
- Male patients Mean age 22 years range (14-35) Dominant side 70%

Mechanics of injuries

The most frequent initial mechanism was fall in flexion, abduction and external rotation (55 %) followed by tackle in extension, abduction and ext. rotation (35%).

Surgical finding

- In acute instability: capsular tear with complete labrum detachment (type III lesion) was founded in 11 cases (73.3 %), 3 cases (20%) with bone glenoid avulsion. Capsular tear with partial labrum detachment (type II lesion), 3 cases (20%) and in only 1 case (6.6%), capsular tear without labrum detachment (type I lesion). A 75 % of osteochondral Hill-Sachs lesions was identified.
- In chronic cases we found in 57 cases (73%) of labrum and GHL detachment (complete or partial) being 25 cases of them (43.8%) A.L.P.S.A. lesions, all this cases had some degree of capsular involvement. Only