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Original Article

Functional evaluation of repairs to circumferential labral lesions of the glenoid – Case series☆

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ABSTRACT

Objective: To evaluate the clinical results among patients undergoing arthroscopic repair of circumferential labral lesions.
Methods: This was a retrospective study on 10 patients who underwent arthroscopic repair to circumferential labral lesions of the shoulder, between September 2012 and September 2015. The patients were evaluated by means of the Carter-Rowe score, DASH score, UCLA score, visual analog scale (VAS) for pain and Short-Form 36 (SF36). The average age at surgery was 29.6 years. The mean follow-up was 27.44 months (range: 12–41.3).
Results: The mean score was 16 points for DASH; 32 points for UCLA, among which six patients (60%) had excellent results, three (30%) good and one (10%) poor; 1.8 points for VAS, among which nine patients (90%) had minor pain and one (10%) moderate pain; 79.47 for SF-36; and 92.5 for Carter-Rowe, among which nine patients (90%) had excellent results and one (10%) good. Joint degeneration was present in one case (10%), of grade 1. We did not observe any significant complications, except for grade 1 glenohumeral arthrosis, which one patient developed after the operation.
Conclusion: Arthroscopic repair of circumferential labral lesions of the shoulder through use of absorbable anchors is effective, with improvements in all scores applied, and it presents low complication rates. Cases associated with glenohumeral dislocation have lower long-term residual pain.

Avaliação funcional do reparo de lesões labrais circunferenciais da glenoide – Série de casos

Palavras-chave:
Cápsula articular
Instabilidade articular
Articulação do ombro

RESUMO

Objetivo: Avaliar os resultados clínicos dos pacientes submetidos a reparo artroscópico de lesão labral circunferencial.
Métodos: Estudo retrospectivo de 10 pacientes submetidos ao reparo artroscópico de lesão labral circunferencial do ombro de setembro de 2012 a setembro de 2015. Os pacientes

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Artroscopia
Estudos retrospectivos

foram avaliados pelo escore de Carter-Rowe, pelo escore de Dash, pelo escore de Ucla, pela classificação visual analógica de dor (EVA) e pelo Short-Form 36 (SF36). A média de idade na cirurgia foi de 29,6 anos. O seguimento médio foi de 27,44 (variação de 12-41,3) meses.

Resultados: A média dos escores foi de 16 pontos no Dash; 32 pontos no Ucla, seis (60%) resultados excelentes, três (30%) bons e um ruim (10%); 1,8 ponto na EVA, nove (90%) dores leves e um (10%) dores moderadas; SF-36 de 79,47; e na escala de Rowe 92,5 pontos, nove (90%) resultados excelentes e um (10%) bom. Degeneração articular esteve presente em um (10%) caso, de grau 1. Não observamos complicações significativas, a não ser a artrose glenoumeral grau 1, desenvolvida no pós-operatório de um paciente.

Conclusão: O reparo artroscópico da lesão labral circunferencial do ombro com o uso de âncoras absorvíveis é eficaz, com melhoria de todos escores aplicados, e apresenta baixos índices de complicação. Os casos associados a luxação glenoumeral apresentam menor dor residual em longo prazo.

Introduction

Labral lesions and glenohumeral instability are common injuries in populations of athletes and blue-collar workers. Anterior labral lesions (Bankart) were first described by Perthes[1] and Bankart.[2] Superior labral lesions were first described by Andrews et al.[3] in a population of throwing athletes. Snyder et al.[4] later classified SLAP lesions into four categories; 5% out of 2375 lesions were ranked as complex, *i.e.*, those lesions could not be classified as the types/associated types described. The association between Bankart lesions and SLAP lesions is well known; arthroscopic repair has been associated with good results,[6–9] but the treatment of other combinations of labral lesions has rarely been described.

With the advancement of arthroscopy, the combination of labral lesions that appear as a circumferential detachment of the entire glenoid labrum has been acknowledged. Powell et al.[10] classified this injury as a pan-labral SLAP lesion or type IX. Lo and Burkhart described triple labral lesions (anterior, posterior, and SLAP type II) in a retrospective review of seven patients. Two of the seven patients had circumferential detachment of the labrum. All these injuries were repaired arthroscopically with fixation anchors, with no cases of instability recurrence.[11]

This study aimed to report a series of ten patients, presenting scores to evaluate the functional outcome of treatment of circumferential labral lesions.

Material and methods

Between September 2012 and September 2015, ten patients underwent arthroscopic treatment of circumferential labral lesions and were operated in the Orthoservice Hospital in São José dos Campos (SP) by a single surgeon. The distribution according to age and activity with probable association with the disease is shown in Table 1. All patients were male. The study included patients with one or more episodes of anterior shoulder dislocation or symptoms and examination compatible with hidden instability or higher labral lesion after magnetic resonance imaging (MRI, Fig. 1). The minimum follow-up was defined as one year. Exclusion criteria in the selection of patients comprised cases of traumatic dislocation associated with nerve and vascular injuries, trauma cases related to fractures at other sites of the shoulder girdle, Hill-Sachs lesion involving more than 25% of humeral head, and Bankart lesion involving more than 25% of the glenoid.

Table 1 – Patients' clinical data.

Patient	Age	Activity
1	52	Blue-collar worker
2	26	Athlete
3	41	Blue-collar worker
4	29	Athlete
5	18	Athlete
6	31	Athlete
7	32	Blue-collar worker
8	20	Athlete
9	18	Athlete
10	35	Blue-collar worker
Mean	30.2	

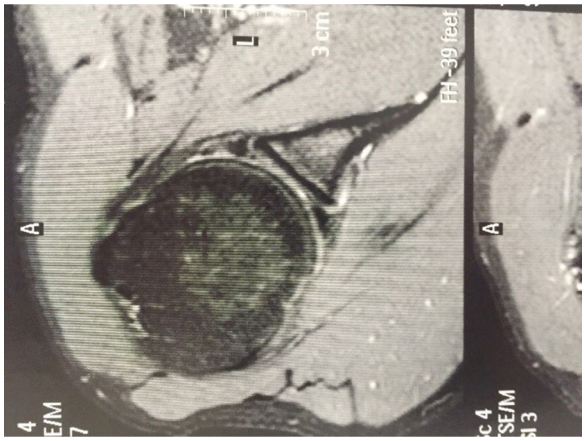

Fig. 1 – Magnetic resonance image showing anterior and posterior labral injury.

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