

## Functional Outcomes and Return to Sports After Arthroscopic Treatment of Rotator Cuff Calcifications in Athletes

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### Summary:

Despite the high frequency of this condition, there is no information in the literature regarding arthroscopic treatment of rotator cuff calcifications in athletes

### Abstract:

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Background: Arthroscopic treatment of calcific deposits of the rotator cuff tears (RCT) has been described with successful results in the general population. However, despite the high frequency of this condition, there is no information in the literature regarding arthroscopic treatment of rotator cuff calcifications in athletes

Study Design: Case series; Level of evidence, 4.

Methods: This study retrospectively evaluated 24 consecutive patients with a mean age of 36.2 years. The mean follow-up was 59 months (range, 24-91). Patients completed a questionnaire focused on the time to return-to-sport and treatment course. Pre- and postoperative functional assessment was performed using the Constant score and University

of California Los Angeles (UCLA) score. Pain was assessed by visual analog scale (VAS). Radiographs and magnetic resonance imaging (MRI) were performed to evaluate the recurrence of calcifications and the indemnity of the supraspinatus tendon repair.

Results:

Of the 24 patients, 23 (95.8%) were able to return to sports; 91.3% returned to the same level.

The mean time to return to play was 5.3 month (range 3 – 9 month); 26 % of the patients (6/23) returned to sports in less than 4 months, 61% (14/24) returned to sports between 4 and 6 months, and 13 % (3/ 24) returned following the sixth month. The mean Constant score increased from 26.9 preoperatively to 89.7 postoperatively ( $P < .001$ ) and the UCLA score increased from 17.3 preoperatively to 33.2 postoperatively ( $P < .001$ ). Significant improvement was obtained for pain (mean VAS, 8.4 before surgery to 0.6 after;  $P < .001$ ). 91.6 % of patients were satisfied with their result. MRI examination at last follow-up (79% of patients) showed no tendon tears.

Conclusions:

In athletes with calcifying tendinitis of the supraspinatus tendon with failed nonoperative treatment, complete arthroscopic removal of calcific deposits and tendon repair without acromioplasty results in significant pain relief and improvement in functional outcomes. Most patients return to the same level of proficiency regardless of the type of sport and the level of competition before injury.