

# Traitement des fractures déplacées du fond de la glène de la scapula sous assistance arthroscopique. Résultats radiologiques à propos de 11 cas

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## Résumé

Abstract

Introduction

A number of papers are dealing with arthroscopically-assisted treatment of scapular glenoid anterior or superior rim fractures.

By contrast, to the best of our knowledge, only 2 case reports of glenoid fossa fractures treated with arthroscopic assistance are available.

We report the first series of arthroscopically-assisted treatment of fractures of the glenoid fossa of the scapula.

## Methods

Between 2009 and 2020, 11 patients (11 shoulders, 1 female) presenting with glenoid fossa fractures after high energy injuries were treated with arthroscopically-assisted osteosynthesis (1 surgeon). The mean age was 44 years. The average delay between trauma and surgery was 15 days. The articular displacement was superior to 4 mm in 9 cases. We used a modified Goss classification.

The fracture fixation was performed in lateral decubitus position using a mini-invasive dorsal approach between infraspinatus and teres minor centered onto the scapular lateral pillar. Two arthroscopic portals (anterior and posterior) were used to control the articular reduction. Pre and postoperative 3D CT scans were performed in all cases.

## Results

A satisfactory control of the articular reduction was possible in all cases. The combined ORIF (screws or plate and screws) through the mini-invasive dorsal approach provided a stable fixation of the glenoid. No per-operative radiographs were necessary.

Among the 9 patients presenting with an articular step off of more than 4 mm, the pre/post operative step offs, gaps and angulations averaged 10/1 mm, 12/1mm, 75°/3°, respectively.

## Discussion

This retrospective monocentric study confirms the good results of two recent cases reports (2003 and 2015). Combining gleno-humeral arthroscopy and a mini-invasive dorsal scapular approach allows a reduction which is equivalent to large approaches while minimizing injury to normal structures. This method provides a significant improvement over classic ORIF of glenoid fossa fractures and should be promoted. This method presupposes that the shoulder surgeon is familiar with the use of shoulder arthroscopy in lateral decubitus position using a specific traction device.

Keywords: Scapular Glenoid Fracture – Arthroscopy - Osteosynthesis

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