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# **Conservative approach in adhesive capsulitis**

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## Introduction

the first step in treatment of idiopathic adhesive capsulitis is conservative.

## Aim

To compare results of different conservative treatment in the idiopathic adhesive capsulitis.

#### Methods

We have treated with conservative treatment 60 patients with idiopathic adhesive capsulitis. We used two different treatment:

1) 30 patients were treated with a cycle of 5 injection of hyaluronic acid (2ml of low molecular-weight) with 1ml of local anesthetic (ropivacaine 2mg/ml); the injenctions were performed weekly both articolar and subacromial;

2) 30 patients were treated with a cycle of 3 injection of steroid (triamcinolone acetonide) with 1ml of local anesthetic (ropivacaine 2mg/ml); the injenctions were performed weekly both articolar and subacromial; 5 patients of this group were also underwent to anesthetic

## block of the suprascapular nerve (with 1ml of ropivacaine 2mg/ml).

In always cases physiotherapy was associated. The patients began the physiotherapy program consisting of capsule and muscle stretching exercises in all directions and unloaded exercises to promote recovery of passive movement. The patients were also assigned a series of self-assisted exercises to perform at home. We have measured passive ROM before the treatment, after 1 months, after 3 months and after 6 months following the final injenction.

# Results

The mean pre-treatment ROM values in both group were: 80° for forward elevation, 50° for abduction, 15° for external rotation and gluteus for internal rotation.

The post-treatment mean ROM values in the first group showed: 165° for forward elevation, 80° for abduction, 40° for external rotation and L3 for internal rotation.

The post-treatment mean ROM values in the second group showed: 175° for forward elevation, 85° for abduction, 60° for external rotation and D12 for internal rotation.

A reduction of pain was observed in all the patients of groups examined (in the second group there was less pain).

In four patients (12%) of first group and in one patient (3%) of second group the caspulitis was resistent to treatment and these patients required arthroscopic capsular release.

Conclusion

We observed that the association between therapy with steroid and physiotherapy is better than therapy with hyaluronic acid and physiotherapy.

The improvement with steroid - physiotherapy is observed in the shoulder function (less pain and more range of movement). We observed decrease of pain but not a significant improvement of the range of movement in the treatment with hyaluronic acid and physiotherapy.