

Original Article

Periarthritis Shoulder : comparative study between conservative treatment and arthroscopic release a case series

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We compared outcome between two different methods for treating a relatively common condition, ie, Periarthritis shoulder by conservative means and arthroscopic release in a cluster of 30 patients. Arthroscopic release group shown better functional outcome in relation to pain relief and range of motion. Reactive fibrosis after manipulation is common with conservative treatment and relapse rate are high. Risk of chondrolysis and axillary nerve injury is there in arthroscopic release with radiofrequency probe.

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Key words : Frozen shoulder, conservative, arthroscopic release.

Periarthritis shoulder is a common clinical scenario in our day to day practice. Patient presents with restriction of shoulder movement and pain around shoulder. Pathophysiology of periarthritis shoulder is capsular fibrosis of glenohumeral joint and capsular contracture of inferior capsular fold. Various treatment modalities has been described in literature non of them has been proved to stood test of time.

We conducted comparative study between conservative treatment (physiotherapy, analgesic) and arthroscopic release in relation to pain relief and functional outcome.

MATERIAL AND METHODS

30 patients within age group of 35-40 yrs with pain and restriction of shoulder were selected patient were randomized in two group with proper consent and explanation of treatment procedure. Group -1 Patients were subjected for conservative treatment in the form of stretching physiotherapy with theraband, these patient were put on analgesic for pain relief. They were assessed every two weeks for follow up up to six months. Group -2 patients were those patients who did not respond to conservative treatment. These patients were selected for arthroscopic release. They were followed up every two weeks up to six months. Patients were assessed for functional outcome on the basis of pain relief and gain in range of motion. All patient were counselled for both treatment modalities and were explained in detail in their own language for merit and demerits of each procedure

Patient with chronic history of diabetes, uric acid arthropathy and post traumatic shoulder pain were excluded from this study.

RESULT

Group – 1 patient who underwent conservative treatment were assessed regularly for Pain relief and functional outcome. Four patients had fair functional outcome. Six patients had no improvement in pain and range of motion of affected shoulder, after six month of conservative treatment. In group -2 patients' seven patients got relief from pain and gained functional range of motion in three months follow up two patients got relief of pain and gained functional range of motion in six months follow up. One patient had no improvement in pain and range of motion affected shoulder. Overall functional outcome was good in patients treated with arthroscopic procedure.

DISCUSSION

Arthroscopy release has been shown to have good functional outcome¹ compared to conservative treatment. Reeves et al described it as syndrome². Various treatment modalities have been described in literature with inconclusive evidence. Frozen shoulder was described by Codman 1934 he described it difficult to define³. This was small comparative study with very small sample size. Functional outcome and pain relief is faster in arthroscopic release group than conservative group. Previous study with manipulation has shown to increase reactive fibrosis in long term follow up.

All previous study has shown to increase functional outcome following arthroscopic release in patient with no pre-existing metabolic disorder

Only concern with arthroscopic release is its need use of radiofrequency probe one should be careful in using at 6 o'clock position to avoid axillary nerve damage. Aseptic chondrolysis has been described in literature after using radiofrequency probe. The only issue with arthroscopic procedure is steep learning curve and technical expertise. Capsular stretching⁴ and core muscle strengthening physiotherapy are one of the important aspect in

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conservative treatment. Intraarticular steroid⁵ has some role in pain relief and functional outcome but not more than 3 doses are recommended in standard literature

CONCLUSION

Arthroscopic release for Periarthritis shoulder has shown to increase functional outcome and pain relief compare to conservative group. We need further large scale study to evaluate the outcome. If we see risk benefit ratio arthroscopic release seems to be more viable option compare to conservative treatment. All patients should be subjected to conservative treatment those not responding to conservative measure are ideal candidate for arthroscopic release.

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