

To Compare the Results of Operative and Non-operative Management of Rotator Cuff Injury

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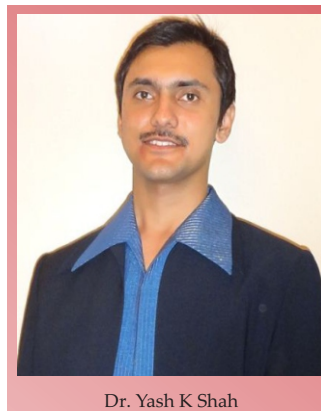
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Abstract

Background: Rotator cuff tears are a common source of shoulder pain. The incidence of rotator cuff damage increases with age and is most frequently due to degeneration of the tendon, rather than injury.

Methodology: 15 patients chosen having rotator cuff injuries and undergone conservative therapies and 15 patients chosen undergone operative management for the rotator cuff tear after failed conservative management.

Patients were assessed w.r.t

i. Range of Motion

ii. ADL (Activities of Daily Life) Affection

iii. Night pains

iv. Constant score

v. Tear size

Result and Conclusions: The incidence of rotator cuff damage increases with age and is most frequently due to degeneration of the tendon, rather than injury. Supraspinatus is one of the most consistently involved. Some tears are asymptomatic. Higher incidence of tears were seen in females than in males. Tear size has no relation in the final outcome of range of motion and pain scores. The indications for operative treatment are presence of bursitis, young age, large tear size. And for non operative treatment are presence of fatty degeneration and/ or muscle atrophy.

Keywords: Rotator cuff, supraspinatus tear.

Thesis Question: Is non-operative treatment just as good as operative treatment for rotator cuff injuries and whether all people need operative treatment?

Thesis Answer: Thus the mandatory indications for operative treatment are presence of bursitis, young age, large tear size. The mandatory indications of non operative treatment are presence of fatty degeneration and/ or muscle atrophy. Otherwise all cases must be tackled initially non operatively.

THESIS SUMMARY**Introduction**

Rotator cuff tears are a common source of shoulder pain. The incidence of rotator cuff damage increases with age and is most frequently due to degeneration of the tendon, rather than injury from sports or trauma. Treatment recommendations vary from rehabilitation to surgical repair of the torn tendon(s). The best method of treatment is different for every patient. The decision on

how to treat rotator cuff tears is based on the patient's severity of symptoms and functional requirements, and presence of other illnesses that may complicate treatment.

Aims and Objectives

Rotator cuff tears are a common problem of the aged and often neglected in the earlier phases, but with better imaging and health

care more and more cases are being seen.

1. To study the natural history and prognosticate the end result of disease with or without operative treatment
2. Further to see whether the natural history can be altered for the better using non operative or operative treatment.
3. To compare the results of operative vs non operative treatment
4. For the future to establish guidelines for treatment purposes, to discuss absolute and relative indications of treatment and to streamline the need for operative treatment and earmark the point of time when such treatment should be instituted.

Material and Methodology

Design: An observational study; prospective study; retrospective study

Sample size: - 15/15

In this study 15 patients were selected having rotator cuff injuries and undergone conservative therapies and 15 patients were selected having undergone operative management for the rotator cuff tear after having failed the conservative management.

All patients were assessed with respect to

- I. Range of Motion
- ii. ADL (Activities of Daily Life) Affection
- iii. Night pains
- iv. Constant score (which includes pain, activities of daily living, range of motion and power.)
- v. Tears whether small/medium/large and whether full thickness/partial thickness

The patients had a pre-op USG and/or MRI done.

Definition of the subject to be studied

Inclusion criteria

- a) Rotator cuff tears proven on imaging
- b) Symptomatic patients who have failed conservative management will be included in the second group i.e. for operative treatment.
- c) High Constant scores

Exclusion criteria

- a) Concomitant plexus injuries along with cuff tears
- b) Previous steroid injection with sepsis

Parameters studied

- a) Range of movement
- b) ADL (Activities of Daily Life) affection.
- c) Night pains
- d) Constant score

Duration of follow up

1-3 years

DATA AND RESULTS

Constant score of Group 1. (Operative treatment)

Mean constant score improvement in Operative group = 26.66

Constant score of Group 2. (Conservative treatment)

Mean constant score improvement in Conservative group = 28.13

Night pains and A.D.L. (Activities of Daily living) in operative group

Mean improvement in night pain in conservative group is 33.33%

Night pains and A.D.L. (Activities of Daily living) in operative group

Mean improvement in night pain in operative group is 31.7%

Mean minimum time taken for complete pain relief for operative group is 97.46 days

Mean minimum time taken for complete pain relief for conservative group is 95.00 days

The TEAR SIZE has NO RELATION to outcome whatsoever.

Summary and Conclusion

1. Rotator cuff tears are a common source of shoulder pain. . The incidence increases with age and is more due to degeneration than injury.
2. Supraspinatus is one of the most consistently involved in the tears.
3. Higher incidence of tears were seen in females.
4. Tear size = no relation in outcome
5. It is essential to identify whether the patients will do better by surgery or not.
6. The time to complete recovery will be also be prolonged depending upon the pathology involved.
7. Bursitis or Bicipital tendinitis when present are bad prognostic factors.
8. Thus the factors affecting outcome are Bursitis, Fatty degeneration, Muscle atrophy, Original tear and age.
9. An average re- tear rate post surgery is 13% & is related to initial tear size.
10. Conservatively managed cases generally tend to become symptomatic in 5 years
11. In late cases surgery does more relief by decompression buy it may increase the chances of a re-rupture.

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