05. Joint stiffness

The use of Dynavisc(R) in Shoulder Surgery to prevent shoulder stiffness

Magobotha, Sebastian
Magobotha, Sebastian
University of Witwatersand, Chris Hani Baragwanath Hospital - Johannesburg ZA

Shoulder stiffness is a frequent occurrence following shoulder surgery. This is due to either immobilization or soft tissue injury during the surgical procedure itself. The management of arthro-fibrosis can be challenging and can lead to prolonged periods of rehabilitation and often unsatisfactory outcomes. Rotator cuff (RC) pathology is common and the treatment is surgical, after conservative management has failed. Arthroscopic or open surgical repair of RC tears can both lead to shoulder stiffness.

In our unit we do a RC repair combined with an Acromio-plasty. Our technique includes both arthroscopic (30%) and open surgical (70%) procedures.

Aim
To determine the incidence of post-surgical shoulder stiffness after an Acromio-plasty with RC repair.

Method
55 patients. Female : male ratio 23:32. Average age 49 yrs. Dominant hand 3:1. All procedures were done by the same surgeon. An open technique was done. Dynavisc® was infused into the joint.

All patients followed a rehabilitation protocol of the shoulder for range of motion and muscle strength, for 6 weeks to 8 weeks.

Results
Total shoulder elevation (in terms of abduction and flexion) and external rotation was achieved significantly earlier.

Conclusion
It’s our opinion that the use of Dynavisc® yields a greater range of motion in shoulder joint movement post RC and Acromio-plasty surgery. We can conclude that Dynavisc® decreases the incidence of arthro-fibrosis.