

# Thermal Capsular Shrinkage

## Indications:

- Performed for **Multidirectional Instability**
- May also be for **Internal Impingement** (Thrower's Shoulder)

It is used specifically for shoulders where capsular stretching appears to be the major source of the problem.

It is thought that the capsular shrinkage acts in several ways to stabilise the shoulder:

- 1- Mechanical shortening of the capsule in the area that is stretched,
- 2- Tightening the proprioceptive sensor feedback mechanism. In the same way that you would use strapping around the shoulder to increase skin sensory input we can improve the shoulder proprioception by tightening the capsule.

As this procedure is done arthroscopically and nothing has been incised or stitched, there is no need to wait to start post-operative physiotherapy. However there is some concern about temporary weakness of the capsule round about 3-6 weeks and hence stretching to regain motion has no part in the early post-operative phase.

As soon as pain allows proprioceptive physiotherapy is started.

## Pre-op

All MDI patients should have had a minimum of 6 months therapy before proceeding to Capsular Shrinkage. They must be taught the following exercises,

- Scapular stabiliser programme
- Gleno-humeral control exercises
- Check core stability
- Submaximal isometric rotator cuff exercises

## **Post op**

Patients are in a polysling for pain relief but the aim is to remove this between 1 and 5 days.

The patient is encouraged to use the arm functionally and active assisted and active range of movement exercises are given.

The patient should be instructed not to push the shoulder or stretch to end of range as the capsule remains weak for the first 6 weeks following the procedure.

## **Aims of Physiotherapy**

Improve scapula and glenohumeral stability

Restore normal scapula humeral rhythm

Improve shoulder proprioception

Retain functional mobility of the shoulder with avoidance of stretching into end of range.

Emphasis should be on control and proprioceptive re-education not regaining range of motion. In these patients avoid any **passive** mobilisation until 6 weeks.

## **Return to Functional Activities**

Patients should avoid contact sports for 3 months, but precision sports e.g. racquet sports can be useful for improving proprioception.

Any overhead activities should be avoided until the patient has adequate scapula control and cuff strength below shoulder height.

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