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Biceps Tenodesis Protocol

Procedure Summary

The intra-articular portion of the biceps is often a cause of pain due to inflammation, hypertrophy, delamination, entrapment, instability or partial detachment. The key aim of the procedure is to remove the painful part of the long head of biceps from the joint, i.e. a tenotomy. An “added bonus” is then to secure this to or into the bone, lower down in the bicipital groove of the humerus in an extra-articular position, i.e. a tenodesis. There is evidence to suggest that this gives a better result in terms of supination power and avoids a complete “popeye” deformity. This is most relevant to young, active patients who are having an operation on the dominant side, or very slim individuals who would easily notice the cosmetic deformity.

Technique:

There is a variety of techniques, all of which involve securing the biceps tendon in a fixed position outside the glenohumeral joint.

Notes:

- If the tenodesis does fail, i.e. the tendon subsequently ruptures/popeye deformity develops, this is not a major problem and the patient should be reassured.

- The rehab should be directed more towards any associated procedures, e.g. rotator cuff repair.

Sling

Not usually needed.

Protocol

Follow only if used as the main procedure:

RESTRICTIONS:

For 2 /12 avoid

- Resisted supination.
- Resisted elbow flexion.
- Resisted straight arm elevation.

Day One

- Importance of pain control.
- Ice pack use + +

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- Sling use.
- Sleeping position (e.g remove sling and use body strap for support).
- Washing and dressing.
- AROM of unaffected joints eg fingers, wrist and elbow.
- Postural advice and scapular setting.
- Encourage waist level ADL's (e.g. brushing teeth, eating).

Exercises taught on ward:
AA shoulder flexion
AA elbow flexion/extension
Active wrist and hand ROM

Follow-up Physiotherapy

Usually at 2/52 post op.

Phase 1 Aim: to increase joint ROM passive to active

Range of movement progressing gradually through the following

1a Passive ROM (controlled by the patient)
1b Active assisted ROM
1c Active ROM

NOTE - encourage SCAPTION rather then pure abduction.
- progress using short to long lever principles.

Phase 2 Aim: Stretching at end of range and strengthening

2a Stretches at end of range
- encourage stretches to be done by the patient using a broom handle etc rather than by physiotherapist
- attention to posterior capsule stretch (within relevant restrictions).

2b Strengthening against resistance only once patient is achieving functional AROM and no pain to resisted muscle testing.
- include strengthening of rotator cuff, UFT, LFT, serratus anterior, biceps, triceps, deltoid as per assessment.

Phase Aim: full active rehab/ higher level function

Start sport specific rehab.

Patients can return back to competitive sports when achieving full AROM and normal strength.

General guidelines

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Consultant post op follow up

All patients are normally followed up in clinic with consultant at 2-6/52 post op

Driving

Usually possible post op at 2/52 for bicep tenodesis ONLY ops., otherwise follow the protocol for any associated procedures

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