SULIS HOSPITAL BATH

BICEPS TENODESIS REHABILITATION GUIDELINES

Protocol

BICEPS TENODESIS

INTRODUCTION

The biceps tenodesis is performed to relocate a damaged or partially torn long head of biceps (LHB) tendon, fromthe glenoid origin to the humerus using screws or anchors. It is often performed in conjunction with a rotator cuffrepair.

The physiotherapy programme will need to be **individualised** for each patient, all exercises should be performed without pain. Some restrictions are placed on the use of the biceps for a while to avoid the relocation of the tendonfrom being pulled away from its fixation before it has a chance to heal. The details of specific restrictions will be in the post-operative instructions. If you have not received these please ring the consultant's secretary.

Emphasise to the patient the importance of protecting the biceps to allow soft-tissue healing in the first two phases.The milestones may be used to assess whether you feel the patient is making good progress or not.

Shoulder rehabilitation is more than strength-training of the shoulder muscles alone. The (neuromuscular) rehabilitation addresses the whole shoulder girdle, upper extremity, core stability and training of the kinetic chain.

POST SURGERY

Phase 1 (1 – 21 days)

Goals:

- Maintain integrity of the relocation
  - Sling at all times except while dressing/washing or doing exercises
  - Teach sling, dressing and personal hygiene techniques
- Management of pain, inflammation and muscle inhibition
  - Analgesics, NSAID's, ice, sling, passive movement and posture
- Teach shoulder girdle control/setting and relaxation
  - Retraction and depression
- Gradually increase shoulder active range of movement (AROM) **as tolerated/not into pain/do not force orstretch**
- Gradually increase elbow active range of movement (AROM) **as tolerated/not into pain/do not force or stretch**
- Hand, wrist and neck range of movement (ROM) exercises as required
- Advice on sleeping position
  - Wearing sling, if supine use a pillow beneath the elbow to prevent the shoulder resting in extension
- Prevent muscle atrophy
  - Sub-maximal, pain-free rotator cuff isometrics in neutral (<30% MVC) as tolerated
- Once stitches have been removed begin scar massage

Precautions:

- Sling usually for 3-4 weeks (check post-operative note)
- No resisted biceps or lifting of objects
- No forced biceps stretch
- No excessive stretching or sudden movements
- No supporting of body weight by hands
- Keep wounds clean and dry

Milestones at 3 weeks:

- Pain, inflammation and muscle inhibition well managed
- Return to pre-operative sleep patterns
- Good scapula setting
- AROM: shoulder and elbow 50% of pre-operative range

Phase 2 (22 Days – 6 weeks)

Goals:

- Allow healing of soft tissue – do not over-load healing tissue
- Continue to manage and reduce pain, inflammation and muscle inhibition
  - As phase 1
  - Alternate treatment strategies as appropriate e.g. soft tissue techniques, taping
- Gradually restore full, pre-op shoulder AROM **as tolerated/not into pain/do not force or stretch**
- Gradually restore full, pre-op elbow AROM **as tolerated/not into pain/do not force or stretch**
- Introduce light elbow strengthening (monitor closely) **as tolerated/not into pain**
  - **Refer to post-op note for specific restrictions**
- Re-establish dynamic shoulder stability
  - Good SHR through AROM
- Return to driving at 4 weeks
- Gradually return to light, non-repetitive functional activities
- Gradually introduce light, early-stage sport-specific exercises

Precautions:

- No lifting of objects
- No excessive stretching or sudden movements
- No supporting of body weight by hands
- Usually wean out of the sling after 3-4 weeks (check post-operative note)

Milestones at 6 weeks:

- Pain, inflammation and muscle inhibition well managed
- Full shoulder AROM with good SHR
- Full elbow AROM

Phase 3 (7 - 14 weeks)

Goals:

- Full AROM
  - Introduce multi-directional stretching into end of range **as tolerated/not into pain**
- Gradually introduce and progress shoulder strengthening **as tolerated/not into pain**
  - Introduce cuff strengthening, progressing to maximal isometrics then to isotonic strengthening
  - Introduce scapular stabilisation exercises
  - Introduce proprioceptive exercises
  - Gradually progress to shoulder and upper limb strengthening **as long as the patient is able to elevate thearm without shoulder or scapular 'hitching'**
  - Gradually progress to dynamic and rhythmic stabilisation exercises
- Gradually progress biceps strengthening (monitor closely)
- Gradually progress lower limb and core strengthening as required
- Gradually progress functional activities
- Gradually progress sport-specific exercises

Precautions:

- Avoid excessive loading of shoulder
  - No heavy lifting
  - No prolonged, repetitive upper limb activities

Milestones at 14 Weeks:

- Resolved pain, inflammation and muscle inhibition
- Full pain-free elbow and shoulder AROM with good SHR throughout range with light resistance/load

Phase 4 (3 – 6 Months)

Goals:

- Maintain full PROM
  - Continue multi-directional stretching into end of range **as tolerated/not into pain**
  - Capsular stretches (especially posterior capsule if tight)
- Full pre-operative AROM with good SHR **as tolerated/not into pain**
- Progress shoulder strengthening **as tolerated/not into pain**
  - Progress cuff strengthening and scapular stabilisation exercises
  - Progress proprioceptive exercises
  - Progress shoulder and upper limb strengthening ensuring good SHR
  - Progress dynamic and rhythmic stabilisation exercises
- Progress biceps strengthening
- Progress lower limb and core strengthening as required
- Progress to heavier functional activities, gradually returning to strenuous work activities as required
- Progress sport-specific exercises**, g**radually returning to contact sports as required

Milestones at 6 months:

- Full pain-free elbow and shoulder AROM with good SHR throughout range with moderate to heavyresistance/load

Sulis Specialist Orthopaedic Shoulder Team

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