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Surface Replacement Arthroplasty

Physiotherapy Protocol

This operative procedure is performed in cases of severe OA or RA of the GHJ, where pain is the predominant feature. The hemiarthroplasty is the usual method of choice. Early mobilisation is encouraged. As subscapularis is released and reattached to the anatomical neck of humerus at the end of the procedure there should be no resisted internal rotation for the first three weeks and care should be taken with the range of external rotation (guided by Consultant's op notes – will give us the 'safe' range of external rotation.

Day 1

- Polysling fitted in theatre
- Finger, wrist and radio-ulna movements
- Active elbow flexion and extension
- Shoulder girdle exercises and postural awareness

Day 2

- Axillary hygiene taught
- Exercises continued as above
- Pendular exercises added
- Passive flexion/extension in scapular plane in supine
- Continue with shoulder girdle exercises, postural awareness and include scapular setting
- Arrange outpatient physio to commence within 2 - 3 weeks of discharge if possible

Discharge to 3 weeks

- Remove sling when comfortable
- Pendular exercises continued
- Isometric strengthening exercises of all muscle groups (except internal rotation (IR))
- Begin passive abduction (maintain shoulder in IR)
- Begin passive external rotation to neutral only or as far as deemed safe by consultant

- Begin active assisted flexion in supine and progress to sitting position as soon as the patient is able. Progress to active if possible
- Encourage relaxation and breathing control
- Hydrotherapy may begin if available and deemed necessary

3 - 6 weeks

- Encourage the patient to actively move into all range. Gentle assisted stretching exercise to increase range – do not force inner range ER
- Add isometric IR – sub maximally and only if pain free
- Commence isometric theraband exercises – resistance dependent on individual and caution re: IR
- Progress to isotonic strengthening
- Encourage proprioceptive exercises – weight and non weight bearing

6 weeks onwards

- Progress strengthening through range, including anterior deltoid exercises
- Continue to regularly stretch the joint to end of range
- Can begin breaststroke if pain and range of movement allows

How well the patient progresses and their outcome will depend on the condition of the joint and soft tissues preoperatively. A better outcome is expected with patients whose joint is replaced for primary OA. Improvement continues for 18 months to 2 years and where possible the patient should not be discharged or should continue exercising until their maximum potential has been reached. The guidelines outlined apply to patients with an intact rotator cuff. If a rotator cuff repair has been carried out in addition to the above procedure, the therapist should adhere to the treatment guidelines for the repair.

Return to functional activities.
These are approximate and may differ depending upon each patient's individual achievements. However, they should be seen as the earliest that these activities may commence

- *Driving* after 4 weeks if safe to do so.
- *Swimming* breaststroke after 6 weeks; freestyle 3 months
- *Golf* 3 months after surgery

- *Lifting* light lifting can begin at 3 weeks after surgery, avoid lifting heavy items for 6 months
- *Return to work* dependent upon the patient's occupation
  - those with sedentary jobs may return at 6 weeks
  - manual workers or those whose occupations demand excess shoulder use should be guided by the Consultant