

Introduction

The guidelines that follow are a frame work of basic exercises and management strategies based on the patient who has had a Regenten© Bioinductive Implant for a partial thickness rotator cuff tear without full repair.

The physiotherapy programme will need to be **individualised** for each patient, all exercises should be performed without pain and 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 repair 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.

Phase I (1-7 days)

Goals:

- Protect the surgical site
- Sling at all times except while dressing/washing or doing exercises
- Teach sling, dressing and personal hygiene techniques
- Ensure wound healing
- Diminish pain and inflammation
- Analgesics, NSAID's, ice, sling, passive movement and posture
- Prevent stiffness and regain motion
- Gradually increase PROM **as tolerated/not into pain/do not force or stretch**
 - Pendulum
 - ER/IR (Check post-operative note for restrictions if there is any)
 - FF (Check post-operative note for restrictions if there is any)
- Teach shoulder girdle control/setting and relaxation
- Retraction and depression
- Gradually introduce active assisted range of movement (AAROM) **as tolerated/not into pain/do not force or stretch**
- Hand, wrist, elbow 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
- **Precautions:**
- Sling for 1-3 days (check post-operative note)
- No lifting of objects over 5lbs
- No excessive shoulder extension
- No excessive stretching or sudden movements
- No supporting of body weight by hands
- No driving for 1 week

Milestones:

- Pain, inflammation and muscle inhibition well managed
- Return to pre-operative sleep patterns
- Good scapula setting

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Phase 2 (1 - 6 weeks)

Goals:

- Continue to manage and reduce pain, inflammation and muscle inhibition
- As phase 1
- Alternate treatment strategies as appropriate e.g. manual therapy techniques, taping
- Gradually restore full, pre-op PROM **as tolerated/not into pain/do not force or stretch**
 - **Refer to post-op note for further specific restrictions**
- Gradually progress AAROM to AROM **as tolerated/not into pain**
 - **Refer to post-op note for further specific restrictions**
- Improve postural awareness
- Re-establish dynamic shoulder stability - Ensure good scapular-humeral rhythm (SHR) through PROM and use it to guide progression of AAROM and AROM
- Sub-maximal, isometric cuff and shoulder girdle muscles contraction **as tolerated/not into pain**
 - Then progress to light, isotonic strengthening, ensuring good SHR **as tolerated/not into pain**
- Introduce lower limb and core strengthening as required
- Minimise stress to healing structures
- Do not over-load healing tissue
- Independent with activities of daily living (ADLs)
- Prevent muscular inhibition
- Wean from sling
- Gradually return to light, non-repetitive functional activities as weaning out of the sling **as tolerated/not into pain**
- Once stitches have been removed begin scar massage
- **Precautions:**
- Avoid excessive loading of shoulder
- No heavy lifting
- No prolonged, repetitive upper limb activities
- Do not force painful motions
- No excessive stretching
- No supporting of full body weight on operated arm
- Return to driving between 1-6 weeks as comfort and control allows
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Milestones at 6 weeks:

- Full pain-free ROM with good SHR
- No pain or tenderness on examination

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Phase 3 (6 weeks+)

Goals:

- Improve strength, power and endurance
 - Introduce scapular stabilisation exercises
 - Gradually progress to full shoulder and upper limb strengthening **as long as the patient has regained full, pain free ROM with good SHR**
- Improve neuromuscular control
 - Introduce proprioceptive exercises
 - Gradually progress to dynamic and rhythmic stabilisation exercises
- Gradually progress lower limb and core strengthening as required
- Gradually progress functional activities
- Prepare athlete to begin to throw, and perform similar overhead activities or other sports-specific activities
 - Gradually introduce and progress sport-specific exercises as comfort and control allows
- **Return to Sports:**
- 12 week and beyond once adequate strength achieved for sports-specific criteria

CircleBath Specialist Orthopaedic Shoulder Team

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To contact the Consultants Secretaries, call Circle Bath Hospital on 01761 422222 or to contact the Physiotherapy team call 01761 422388.



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