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ORTHOPEDIC & SPORTS MEDICINE SPECIALISTS

Green Bay • Fox Valley • Marinette

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Physical Therapy Protocol: Biceps Tenodesis

Philosophy:
Our biceps tenodesis protocol begins with early flexibility and stretching, followed by a progression to strengthening, and then advanced function. These are progressed quickly to prevent the most common cause of failure (stiffness). Individual variations will occur depending on surgeon input, concomitant rotator cuff findings, and patient response to treatment. The following are guidelines for biceps tenodesis rehabilitation.

Phase I, surgery to 4 weeks

OSMS appointments:
Medical appointment at 2 weeks with films
Rehabilitation appointments begin 4-6d after surgery

Rehabilitation Goals:
Cryotherapy unit to the shoulder: twenty minutes every two hours to reduce swelling
Full passive ROM for shoulder flexion, abduction, IR and ER
Achieve activation of the stabilizing muscles for the GH and scapulothoracic joints

Precautions:
Strict sling for 4 weeks
No lifting anything heavier than 12 oz
No bicep tension for 4 weeks to protect tenodesis. This includes avoiding long arm flexion and resisted supination or elbow flexion (No ER past 40º, no shoulder extension).

Suggested Therapeutic Exercises:
Grip strengthening
Forearm and wrist ROM
Cervical spine & scapular active ROM
Desensitization for axillary n distribution
Elbow AAROM/PROM without resistance (to allow the biceps tendon time to heal into the new insertion site on the humerus without stress)
AAROM/PROM for shoulder flexion, abduction, IR and ER

Cardiovascular Exercises (with sling on):
Walking, Stairmaster, or stationary bike

Progression Criteria:
Incisional healing, full PROM of shoulder, and of elbow in sup/pron/flex/extension
Negative impingement pain or shoulder apprehension

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Phase II, 4-6 weeks

OSMS appointments:
MD appointment at 6 weeks
Rehabilitation appointments every 5-7 days

Rehabilitation Goals:
Advance to AROM for shoulder flexion, abduction, IR and ER to neutral (and normal scapulothoracic movement)
Begin proprioceptive and dynamic neuromuscular control training
Strengthen shoulder and scap stabilizers
Full discontinuation of sling

Precautions:
No cross-frictional massage
No swimming, throwing or overhead serves
Avoid activities that have risk for falls

Suggested Therapeutic Exercises:
Gentle shoulder mobilizations as needed
AAROM/AROM in all planes-assessing scapular rhythm
RTC strengthening
Ball squeezes
Core strengthening

Cardiovascular Exercises:
Stationary bike without arms
Impact exercises are only allowed once the patient exhibits full RTC strengthening in neutral position (to avoid distractive forces when landing)

Progression Criteria:
Full shoulder AROM, scapular posture at rest and dynamic scapular control with ROM and/or functional activities

Phase III, 6-12 weeks

OSMS appointments:
MD appointment at 12 weeks
Rehabilitation appointments every 1-2 weeks

Rehabilitation Goals:
Full shoulder and scapular ROM, all planes
5/5 RTC strength and peri-scapular strength

Precautions:
No swimming, throwing, or overhead serves until 12 weeks

Avoid activities that have risk for falls

Suggested Therapeutic Exercises:

At 6 weeks, begin light isometrics with the arm at side
At 6 weeks, begin scapular PREs
At 8 weeks, UE ergometer, weighted ball toss, body blade, for eccentrically resisted motion
Demonstrate stability with higher velocity movements and change of direction that replicate sport-specific patterns
Pain-free return to high velocity overhead movements
Improve core and hip strength & flexibility to eliminate any compensatory stresses to the shoulder
Work capacity endurance for specific demands

Progression Criteria:

The patient can progress to full activities when they have met goals pain-free (appropriate RTC and scapular musculature performance for chest level activities)
Return to throwing and begin swimming at 12 weeks
Throw from pitcher's mound at 18 weeks
Return to collision sports at 26 weeks
MMI is usually 26 weeks

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