Hendricks Regional Health
ORTHOPEDICS

HENDRICKS ORTHOPEDICS
& SPORTS MEDICINE
100 Hospital Lane, Suite 300
Danville, IN 46122
317.718.4676

Posterior Labral REPAIR

1. Timelines:
    a. Follow Up with Surgeon:
        i. **2 weeks** post-op via a telemedicine visit. Please send updated PT notes to surgeon on last visit before telemedicine visit. Pt will be submitting on their own a picture of the incision via their EMR portal day before surgery. Fax therapy notes to (317) 718-2676
        i. **6 weeks** in person with the surgeon. Please send therapy notes before follow-up appt.

    b. **Suture Removal**: Therapist to remove portal sutures at days 10-14.
        i. Apply steri-strips over portal after removing sutures.

2. Defined
    a. Reattachment and repair of the posterior labrum and capsule to the glenoid
3. Goals
    a. Protect healing tissue
    b. Control post-operative pain and swelling
    c. Improve post-operative range of motion
    d. Improve functional strength, stability, and neuromuscular control
    e. Prevent recurrent anterior dislocations of the humeral head
4. Rehabilitation Principles
    a. Be aware of repaired and healing tissue, avoid early pressure and stress on the posterior capsule therefore early phase limits IR of the GH joint.
    b. Healing tissue should never be overstressed but appropriate levels of stress are beneficial
        i. Inflammatory phase days 1-3
        ii. Tissue repair with proliferation phase days 3-20
        iii. Scar tissue most responsive to remodeling 21-60 days but occurs from 1 to 8 weeks
        iv. Final maturation taking as long as 360 days
    c. Tissue reactivity of the shoulder and tissue healing will dictate the rehabilitation process. Reactivity is determined by the clinical exam
        i. Level I Reactivity
            1. Resting pain, pain before end range.
            2. Aggressive stretching is contraindicated.
            3. Grade I-II mobilization for neurophysiological effect
        ii. Level II Reactivity
            1. Pain onset occurs with end range resistance
            2. Grade III and IV mobilization appropriate per patient tolerance
        iii. Level III Reactivity
            1. Engagement of capsular end feels with little or no pain.
            2. Pain occurs after resistance.
            3. Grade III and IV mobilization and sustained stretching is appropriate
    d. Eliminate inflammation as the cause of pain and neuromuscular inhibition

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e. Ensure return of appropriate joint arthrokinematics
f. Apply techniques in loose packed unidirectional and progress to close packed and multidirectional based on tissue healing and patient response
g. Facilitate performance of complex skills with proprioceptive and kinesthetic techniques: Low to high, sagittal to frontal, bilateral to unilateral, stable to unstable, slow to fast, fixed to unfixed surface
h. Encourage life-long activity modification to reduce risk factors associated with re-injury. Work within the "safe zone" for upper extremity activity.
i. Encourage integration of core strengthening with therapeutic exercises
j. Factors that affect the rehab process
    i. Surgical approach
    ii. Tissue quality
    iii. Presence of concomitant pathology
    iv. Age of patient
    v. Co-morbidities
    vi. Pre and intra-operative range of motion
    vii. Pain and sensitivity levels
    viii. Cognitive abilities
k. Re-establish voluntary and pain free control of the rotator cuff to prevent rotator cuff shutdown and decrease humeral head migration with AROM. Exercising through the shrug sign may damage the repair. Progress through the following:
    i. Isometrics
    ii. Active assisted elevation with eccentric lowering and isometric holds
    iii. Isotonics <90 degrees ("downstairs" or gravity eliminated)
    iv. Isotonics >90 degrees ("upstairs")
    v. Rhythmic stabilization
        1. Flexion (prone and supine)
        2. Internal/External rotation
l. Maintain scapular stabilization and mobility; proximal stability for distal mobility

5. Post op functional guidelines
    a. Dependent on functional range, strength, and neuromuscular control
    b. Drive
        i. Refer patient to physician
        ii. Refer patient to drug precautions
        iii. Refer patient to auto insurance coverage
        iv. No research to support recommendations for return to driving
    c. Work
        i. Sedentary up to 14 days
        ii. Medium to high physical demand level will be job specific
            1. Dependent on functional demands of the job
            2. Physician input is required to make final decision
    d. Sport
        i. Golf no earlier than 12 weeks
            1. Encourage backward golfing
                a. Beginning putting at 4 weeks

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b. Utilize the driving range for all practice
c. Begin with short irons and partial swings progressing to long irons and full swing
d. Progress to drivers and hybrid by 12 weeks

ii. Swimming
1. Kick board with arms at side at 6 weeks
2. Freestyle stroke no earlier than 14 weeks

iii. Weight lifting no earlier than 12 weeks
1. Reinforce safe zone principles
2. Emphasize scapular stabilizers
3. Begin with individual muscles, single joint movement, and light weights progress to large muscle groups, multi-joint movements, and heavy weights
4. Incline bench, bench press, and military press begin at 10-15 weeks.

iv. Throwing
1. Emphasize proper biomechanics and proprioception with a functional progression through phases of throwing no earlier than week 16
2. Initiate interval throwing program no earlier than 24 weeks
3. Throwing from the mound no earlier than 24-36 weeks

v. Contact sports
1. No earlier than 24 weeks

6. Post op equipment guidelines
a. Sling with abduction pillow at all times when not bathing or performing exercises
i. Begin weaning out of sling at 4-6 weeks per MD orders
ii. **Be sure of appropriate fit keeping in mind appropriate IR ROM limits** – the sling and pad should be placed to keep the upper extremity in a neutral position
b. Polar Care as needed for pain and inflammation
7. Rehabilitation for posterior labral repair

Phase I -Immediate Motion Phase (Weeks 0 - 6)

Weeks0-4:

- Sling for 4 weeks
  - **Be sure of appropriate fit keeping in mind appropriate IR ROM limits**
- Elbow/hand ROM and hand gripping exercises
- Shoulder PROM/Gentle AAROM – gradually restore painfree PROM
  - Flexion to 90°, ABD in scapular plane to 90° ER to 60° in scapular plane
  - IR to 30° in scapular plane
  - Pendulum/Rope and pulley exercises
  - Isometrics: Sub-maximal, painfree Abduction ER/IR Biceps
- Pain control modalities

Weeks 4-6:

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- ROM: Flexion to 120°, ABD to 100°, ER to 75°, IR to 45° in multiple angles of ABD
- Strengthening:
  - Scapular strengthening exercises Rhomboids Middle/Lower Trapezius Serratus anterior
  - Sidelying ER/IR with arm at side
- Gentle joint mobilizations (avoid posterior glides)

Weeks 6-8:

- Continue to progress ROM: Flexion to 140°, ABD in scapular plane to 140°, ER to WNL, IR to 75° at multiple angles of ABD
- Continue joint mobilizations as appropriate including gentle posterior glides
  - Strengthening:
    - Initiate light isotonics (start with weight of arm and progress 1#/wk if good form) Supraspinatus ER/IR Prone horizontal abduction Biceps (not if SLAP lesion)
    - Manual resisted diagonal patterns
    - Initiate light rhythmic stabilization/proprioception drills
    - Initiate UBE – no resistance

Phase II -Intermediate Phase (Weeks 8 -15)

Weeks 8 -10:

- Progress to full ROM – continue joint mobilizations as appropriate
  - Strengthening: Progress weight/reps of RTC and scapular strengthening program
  - Progress proprioception drills to single arm and closed chain with ball against wall

Weeks 10 -15:

- Continue ROM/flexibility exercises
- Continue self-capsular stretches
- Strengthening: Continue RTC/scapular strengthening program Initiate isokinetic strengthening in neutral (high speed/high reps) Initiate general shoulder strengthening with shoulder precautions at 12 weeks
  - Bench press (narrow grip, arms in front of plane of body) Pull downs (narrow grip, in front of body) Shoulder press (dumbbells, in front of body, elbows close to side) Push-ups (narrow width, keep shoulders above elbow height)
  - Do not overstress the posterior capsule with aggressive overhead activities/strengthening
- Initiate plyometric program (2 handed ~ I handed)

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Phase III -Advanced Phase (Weeks 16 -23)

- Continue all flexibility exercises: ER/IR stretch Flexion stretch Self-capsular stretches
- Continue RTC, scapular and general shoulder strengthening with precautions
- Initiate interval sport program
    - Begin throwing program Begin hitting (progress from tee ~ soft toss ~ live hitting over 3 -4 weeks)

Phase IV -Return to Activity Phase (Weeks 24-36)

- Continue flexibility program
- Continue strengthening program
- Progress interval sport program Progress from long toss to level ground pitching to off the mound
- Testing for throwers: Isokinetic test for Abd/Add and ER/IR at 90° abd at 60, 180 and 300°/sec

Criteria for return to play:

- Physician approval
- Satisfactory ROM
- Satisfactory strength test
- Satisfactory clinical exam
- Satisfactory completion of interval sport program