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Rehabilitation Protocol Following Nirschl Procedure for Lateral Epicondylitis

DISCLAIMER: The intent of this protocol is to provide therapists with guidelines for rehabilitation based on a review of the best available scientific literature for this type of surgical procedure performed by Dr. Avallone using his operative technique. It is not intended to serve as a substitute for sound clinical decision making. Therapists should consult with Dr. Avallone if they require assistance in the progression of post-operative patients.

Phase I – 0-10 days postop:

- Maintain splint
- Elevate and ice elbow for swelling control
- Keep dressing dry

Phase II – 11 Days to 35 Days:

Goals

- Reduce inflammation and pain
- Promote tissue healing
- Retard muscular atrophy

Treatment Regimen (as long as incision healed)

- Cryotherapy
- Whirlpool
- Stretching to increase flexibility
 - Wrist extension and flexion
 - Elbow extension and flexion
 - Forearm supination and pronation
- High-voltage galvanic stimulation
- Phonophoresis
- Avoiding painful movements (e.g. gripping)

Phase III – 36 Days to 70 Days:

Goals

- Improve Flexibility
- Increase muscular strength and endurance
- Increase functional activities and return to function

Treatment Regimen

- Emphasize concentric and eccentric strengthening
 - Concentrate on involved muscle group or groups
 - Wrist extension and flexion
 - Forearm pronation and supination
- Initiate shoulder strengthening (if deficiencies are noted)
- Continue flexibility exercises
- May use counterforce brace
- Continue use of cryotherapy after exercise or function
- Initiate gradual return to stressful activities
- Gradually reintroduce previously painful movements

Phase IV – Day 71 and beyond:

Goals

- Improve muscular strength and endurance
- Maintain and enhance flexibility
- Gradually return patient to sport or high-level activities

Treatment Regimen

- Continue strengthening exercises (emphasize eccentric and concentric exercises)
- Continue to emphasize deficiencies in shoulder and elbow strength
- Continue flexibility exercises
- Gradually diminish use of counterforce brace
- Use cryotherapy as needed
- Initiate gradual return to sport activity
- Recommend equipment modifications (e.g., grip size, string tension, playing surface, work ergonomics)
- Emphasize maintenance program

Adapted from Wilk KE, Arrigo CA, and Andrews JR in Campbell's Operative Orthopaedics Tenth Edition