RAPID RESEARCH



@physicaltherapyresearch

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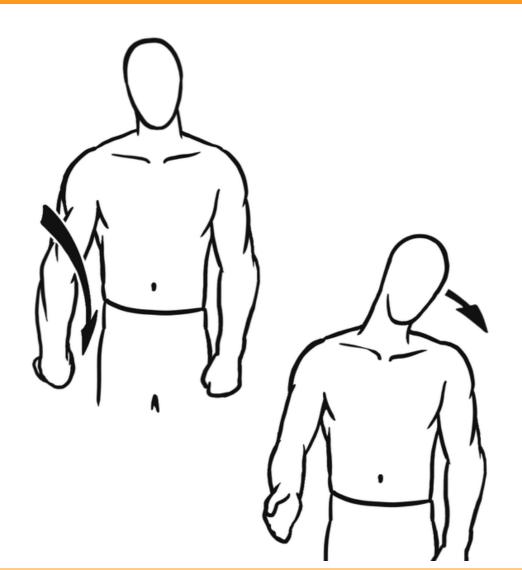
Inside This Week: The Radial Nerve

- Radial Nerve Mobilization for Lateral Elbow Pain
- Radial Nerve Injuries
- Characteristics of Surgically Treated Radial Nerve Inury

RADIAL NERVE MOBILIZATION FOR LATERAL ELBOW PAIN

<u>Click for Full Text</u> (<u>Arumugam et al. 2014</u>)

This study evaluated the effect of neural mobilization of the radial nerve on a single occasion in terms of its ability to reduce lateral elbow pain.



KEY FINDINGS

41 computer professionals with lateral elbow pain included.

Pain rated using numeric rating scale (NRS).
Radial nerve tested with Upper limb Tension Test (ULTT)

Radial nerve mobilized 8 oscillations, 3 sets, 1 minute rest.

Results:

Average reported pain reduced from 5.7 to 3.8 in the immediate term.

MAIN TAKEAWAYS

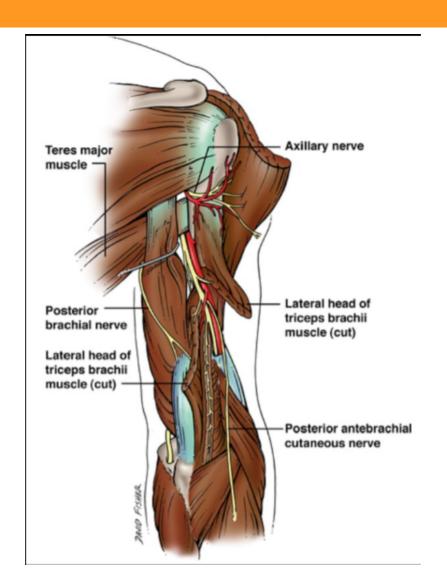
Mobilization of the radial nerve resulted in a significant short-term relief in the lateral elbow pain of computer users.

Using this technique can support the rehab process by reducing symtpoms.

RADIAL NERVE INJURIES

Click for Full Text (Latef et al. 2018)

This research reviewed both etiologies of radial nerve entrapment and the sites at which this can occur in the arm.



KEY FINDINGS

Etiology:

Humeral shaft fractures are the leading cause of radial neuropathy in the arm.

Lateral Intermuscular septum is also a common site of radial nerve compression.

Anomalous Brachioradialis Muscle can compress the radial nerve.

Saturday Night Palsy - Arm and nerve compressed for prolonged time

Clinical Presentation:

Loss of the ability to supinate the forearm while still being able to extend it.

Loss of mobility in extensor carpi radialis longus & brevis, which extend the wrist.

Loss of sensation in posterior forearm, dorsum of hand & lateral 3 fingers.

Management:

Classified into complete or partial and primary or secondary.

Treated conservatively with NSAIDs, corticosteroids, and rest.

Maintenance of a full passive range of motion is critical during therapy.

MAIN TAKEAWAYS

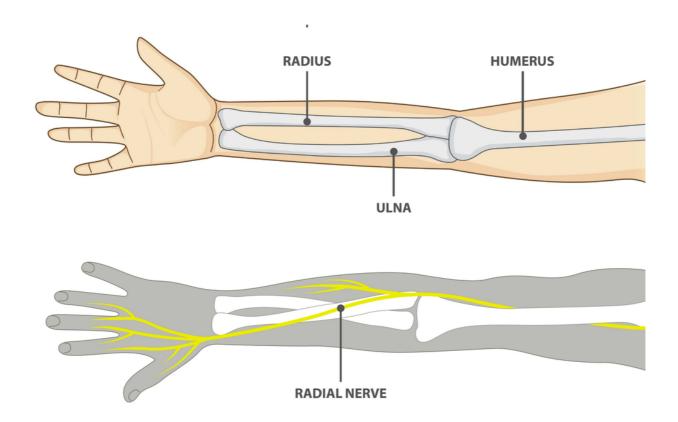
Injury of the radial nerve can arise from a varied set of pathologies including trauma, tumors, anomalous muscles, and intramuscular injections.

Physicians and clinicians should have a good working knowledge of the anatomy and potential mechanisms for radial nerve injury.

CHARACTERISTICS OF SURGICALLY TREATED RADIAL NERVE INURY

Click for Full Text (Rasulic et al. 2022)

This study described the etiological and epidemiological characteristics of patients with surgically treated radial nerve lesions of various origins.



KEY FINDINGS

147 consecutive patients with radial nerve lesion, treated in the department during the last 20 years

Characteristics:

Majority of patients belonged to working population.

70.1% were male.

63.3% caused by trauma

28.6% caused by iatrogenic injury (28.6%)

4.1% were idiopathic or neoplastic.

Most Common Mechanism:

Fracture-related contusion (29.9%) Postoperative fibrosis (17.7%) Lacerations (17.7%) Compression (15.6%).

MAIN TAKEAWAYS

Based on the fact that traumatic or iatrogenic injuries constitute the majority of cases, with their relevant mechanisms and upper arm predomination, it is crucial to raise awareness and understanding of the radial nerve injuries among orthopedic surgeons to decrease the numbers of these patients and properly preserve or treat them within the initial surgery.

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