Chronic Lateral Elbow Pain with Nerve Entrapment - An Advanced Physiotherapeutic Approach

Singh, Sandeep

Department of Physiotherapy & Sport Science, Punjabi University, Patiala-147002

Abstract

The case study was conducted on a female patient age 45 years, a computer professional complaining pain on lateral elbow. Study was conducted to differentially diagnose the lateral elbow pain as it is difficult to diagnose because of different pathologies. Secondly this study was done to see the effectiveness of nerve tension testing procedure as a diagnostic and treatment tool. Based on result of the study, it is concluded that lateral elbow pain in this case was due to radial tunnel syndrome which is mostly misinterpreted as lateral epicondylitis. In this two nerve tension tests were used i.e. ULTT 1, ULTT.2b and it is concluded that mobilisation of nerve is a very effective tool in cases of RTS.

Key Words: Radial Tunnel Syndrome, Mobilisation, Lateral Epicondylitis, VAS Scale

Introduction

Patient experienced right lateral elbow pain from last four months. Cause of the injury could not be identified but complained of increased pain while working on a key-board. Her pain varied day to day depending upon activities. Gripping activities like using scissors, wringing aggravated her symptoms. Occasionally she felt burning pain over the lateral epicondyle. She pointed to an area corresponding to radial tunnel as location of her pain. VAS scale varied from 1 to 6 depending upon the activity.

Evaluation & Assessment

1. Cervical Clearing Examination ROM was normal.
2. Compression & Distraction tests were negative.
3. No movement produced elbow pain.
4. ROM of shoulder, elbow, wrist, fingers was normal.
5. Passive stretching of extensors forearm musculature with wrist and fingers flexed and elbow extended caused moderate tolerable pain with no limitation in ROM
6. Isometric contraction of wrist extensors with elbow extended caused pain in radial tunnel area
7. M.M.T: Wrist finger thumb extensor – 4
   Grip force measured by Hand Dynamometer was 28kg on left with no pain. 14 kg right with pain

On Palpation: Mild discomfort was noted on palpation of Lateral Epicondyle while patient reported acute pain on palpation of radial tunnel. Tenderness on muscle bellies of external Carpi Radialis Brevis & Longus.

Neural Tension Testing: was performed on both upper limbs for comparison.

Median nerve testing (ULTT1) & Radial nerve testing (ULTT 2b) was performed. With Median Nerve Test there was limitation of 15 degree of elbow extension when the wrist was extended before elbow. Radial Nerve Testing reproduced pain in the right lateral elbow.

Differential Diagnosis

Radial tunnel Syndrome & Lateral Epicondylitis.

1. Patient felt burning sensation over lateral elbow which indicated nerve irritation.
2. On palpation she had more pain on radial tunnel than lateral epicondyle.
3. Resisted wrist extension caused more pain over the radial tunnel.