E-Poster

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Incidence of Ulnar Nerve Entrapment Among Carpal Tunnel Syndrome Patients and Factors Modifying It: Epidemiologic Study Study

Topic: Health Conditions (Nervous System, Musculoskeletal System, Cardiopulmonary System)

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BACKGROUND

There are frequent association between carpal tunnel syndrome (CTS) and ulnar nerve entrapment whether below or above wrist leading to high intensity symptoms and suboptimal results of CTS decompression surgery.

Measure the incidence of ulnar nerve entrapment among (CTS) patients and factors modifying it

METHODS

Cross sectional prospective study, outpatient setting

410 patients presented with hand numbness and paresthesia suspecting CTS.

Exclusion criteria: history of cervical trauma, radiculopathy or nerve injury.

Each patient was subjected to the following: demographic data including body mass index, (BMI), medical history including diabetes mellitus (DM). neurological exam including Tinel sign, Phalen test.

Upper extremities nerve conduction studies including comparative techniques for median nerves. Dorsal ulnar cutaneous nerve and, electromyography of segment pointing muscles. Neurophysiological grading of CTS; very mild, mild, moderate, severe.

RESULTS

Four hundred ten patients; 178 male, 232 female. Mean age 56.97 ± 12.25. Mean BMI 32.39 ± 6.10. Diabetes detected in 34.1%. Bilateral CTSs in 96.3%. 81.2% were mild CT. Ulnar nerve entrapment below wrist (Guyon canal syndrome) in 38.8% of CTS patients. Male has more significant bilateral Guyon canal $p = 0.001$. Guyon canal is more significant with diabetes $p = 0.001$, older age $p = 0.001$ and higher BMI $p = 0.036$. Ulnar nerve entrapment above wrist occurred in 8.3%. among CTS patients. Significantly higher with higher BMI $p = 0.016$. significant incidence of ulnar nerve entrapment above and below wrist with very mild CTS ($p = 0.001$, $p = 0.002$ respectively).

CONCLUSION

Significant incidence of Guyon canal syndrome among carpal tunnel patients. This is significantly influenced by male sex, older age, diabetes, and higher BMI

Statement of Disclosures

None

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