CARPAL TUNNEL SYNDROM: ANATOMICAL PERSPECTIVE

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ABSTRAK

Sindrom terowongan carpal, yang dikenal dengan *Carpal Tunnel Syndrome* (CTS), adalah kondisi medis yang terjadi ketika nervus medianus, yang melintasi pergelangan tangan menuju jari-jari tengah dan ibu jari, terjepit atau tertekan di dalam terowongan carpal. Terowongan carpal terletak di pergelangan tangan dan terdiri dari tulang dan jaringan ikat yang membentuk lantai dan atap terowongan. Nervus medianus dan tendon otot-otot fleksor tangan melintasi terowongan ini. Rata-rata, setidaknya 3,8% dari orang yang mengeluhkan nyeri, ketidakresponsifan, dan sensasi gatal di tangan mereka menderita CTS. CTS dijumpai 276 per 100.000 laporan tahunan. Prevalensi kondisi ini dapat bervariasi tergantung pada faktor-faktor seperti populasi, gaya hidup, dan kebiasaan kerja. Terowongan carpal adalah jalur osseo-fibrous yang sempit yang ditemukan di bagian depan pergelangan tangan. berfungsi sebagai pintu masuk ke telapak tangan untuk nervus medianus, tendon dari flexor digitorum superficialis, flexor digitorum profundus dan flexor pollicis longus. Struktur abnormal di dalam dan di sekitar terowongan carpal dapat meningkatkan volume terowongan carpal yang dapat mengakibatkan kompresi nervus medianus. Kompresi nervus medianus dimanifestasikan oleh kelemahan dan hilangnya kekuatan otot-otot thenar, dan hilangnya sensasi kulit dari permukaan palmar dari tiga setengah digit lateral. Oleh karena itu, pengetahuan tentang struktur di dalam dan di sekitar terowongan carpal serta lokasi kompresi berguna dalam menentukan patologi dan pengobatan yang tepat untuk neuropati kompresi.

ABSTRACT

Carpal Tunnel Syndrome: Anatomical Review

Compression of the median nerve within the carpal tunnel is called carpal tunnel syndrome and is manifested by weakness and wasting of the thenar muscles. Carpal tunnel syndrome, also known as carpal tunnel syndrome (CTS), is a medical condition that occurs when the median nerve, which crosses the wrist toward the middle fingers and thumb, is pinched or compressed within the carpal tunnel. The carpal tunnel is located at the wrist and consists of bone and connective tissue that make up the floor and roof of the tunnel. The median nerve and tendons of the flexor muscles of the hand cross this tunnel. On average, at least 3.8% of people who complain of pain, unresponsiveness, and itching sensations in their hands suffer from CTS. CTS was found at 276 per 100,000 annual reports. The prevalence of this condition can vary depending on factors such as population, lifestyle, and work habits. The carpal tunnel is a narrow osseo-fibrous pathway found at the front of the wrist. serves as the entrance to the palm for the median nerve, tendons of the flexor digitorum superficialis, flexor digitorum profundus, and flexor pollicis longus. Abnormal structures in and around the carpal tunnel can increase the volume of the carpal tunnel which can result in compression of the median nerve. Compression of the median nerve is manifested by weakness and loss of strength of the thenar muscles and loss of skin sensation from the palmar surface of the three and a half lateral digits. Therefore, knowledge of the structures in and around the carpal tunnel as well as the location of compression is useful in determining the pathology and appropriate treatment for compression neuropathy.

Keywords: CTS, Anatomy, Hand, Carpal Tunnel