

cases of CTS but the provocative tests are much more reliable in "moderate" cases⁽¹⁵⁾.

Based on the above results of the present study of no correlation between presence of provocative signs whether phalen's sign or tinel's sign with steps of severity of electrophysiological study and presence of positive phalen's sign and Tinel's sign in 20 % and 25% of healthy peoples respectively^(12,16), hence those electrophysiological studies is mandatory for diagnosis as well as for severity categorization; furthermore many reports suggested that the neurophysiologic finding of carpal tunnel syndrome has superior sensitivity compared to the clinical sign of the disease; so that the provocative tests often are negative in spite of obvious presentation of the syndrome and evident electrophysiological abnormalities of the disease⁽¹⁴⁾.

In conclusion, provocative tests of carpal tunnel syndrome is not elicited in good percentage of patients, no correlation between presence of provocative signs whether phalen's sign or tinel's sign with steps of severity of electrophysiological study and there is no correlation between severity of electrophysiological study and presence of provocative signs.

References

1. Jilapalli D, Shefner JM. Electrodiagnosis in common mononeuropathies and plexopathies. *Semin Neurol*. 2005; 25:196-203.
2. Bland JD. Carpal tunnel syndrome. *Curr Opin Neurol*. 2005; 18:581-5.
3. Werner RA, Andary M. Carpal tunnel syndrome: pathophysiology and clinical neurophysiology. *Clin Neurophysiol*. 2002; 113(9):1373-81.
4. Urbano FL. Tinel's sign and Phalen's maneuver: physical signs of Carpal tunnel syndrome. *Hospital phys*. 2000; 12:39-44.
5. American Association of Electrodiagnostic Medicine, American Academy of Neurology, American Academy of Physical Medicine and Rehabilitation, Practice parameter for electrodiagnostic studies in carpal tunnel syndrome: Summary statement. *Muscle Nerve*. 2002; 25:918-22.
6. Padua L, Lo Monaco M, Gregori B, et al. Neurophysiological classification and sensitivity in 500 carpal tunnel syndrome hands. *Acta Neurol Scand*. 1997; 96:211-7.
7. Buch JN, Foucher G. Correlation of clinical signs with nerve conduction test in the diagnosis of carpal tunnel syndrome. *J Hand Surg Br*. 1994; 19:720-4.
8. Phalen GS. The carpal tunnel syndrome: 17 years' experience in diagnosis and treatment of 654 hands. *J Bone Joint Surg Am*. 1966; 48:211-28.
9. Stewart JD, Eisen A. Tinel's sign and the carpal tunnel syndrome. *Brit Med J*. 1978; 2:1125-6.
10. Gelmers HJ. The significance of Tinel's sign in the diagnosis of carpal tunnel syndrome. *Acta Neurochir*. 1979; 49:255-8.
11. Seror P. Phalen's test in the diagnosis of carpal tunnel syndrome. *J Hand Surg Br*. 1988; 13:383-5.
12. Kuschner SH, Ebrahimzadeh E, Johnson D, et al. Tinel's sign and Phalen's test in carpal tunnel syndrome. *Orthopedics*. 1992; 15:1297-302.
13. Yazdchi M, Khandaghi R, Arami A. Evaluation of F-Wave in Carpal Tunnel Syndrome (CTS) and Its Prognostic Value. *J Neurol Sci* 2005; 22(1):15-20.
14. Priganc VW, Henry SM. The relationship among five common carpal tunnel syndrome tests and the severity of carpal tunnel syndrome. *J Hand Ther* 2003; 16:225-36.
15. Ahn DS, Kang DH. The relationship between Electro diagnostic Severity and Three Provocative Tests in Carpal Tunnel Syndrome. The complete plastic surgery experience/71ST annual ASPS/PSEF/ASMS.SCINTFIC meeting educational program 2002, volume 6; 985.
16. Katz JN, Larson MG, Sabra A, et al. The carpal tunnel syndrome: diagnostic utility of the history and physical examination findings. *Ann Intern Med*. 1990; 112:321-7.

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