

Matters arising

Writing tremor: its relationship to essential tremor

Sir: Kachi and coworkers¹ investigated nine patients with primary writing tremor and suggested that it is a variant of essential tremor. We report a case of primary writing tremor which responded to primidone therapy.

A 63-year-old right-handed black male complained of "shakiness on writing." He noted that his writing had progressively got worse over the past one year and was currently unreadable. He had recently ceased writing. He had no difficulties with other tasks. He had found that alcohol ingestion in small amounts would improve his writing but several hours after alcohol cessation his writing would be worse. There was no family history of neurological disease or tremor. Neurological examination was normal except for a mild bilateral postural hand tremor and a marked tremor consisting of a rhythmic pronation/supination of the right hand when attempting to write. Propranolol therapy was started and the dose was increased to 100 mg/day. No effect was noted. The dose was not increased further because of a cardiac condition. Propranolol was discontinued and primidone, 50 mg at nighttime, was given. After one week of therapy the patient reported that his tremor had "quieted down," and that his writing was almost normal especially in the morning. A mild tremor on writing was noted. The dose of primidone was increased to 250 mg and further improvement in writing occurred. Placebo therapy was then substituted for primidone. One week later the patient reported that this "medicine did not work" and he was again having difficulty with writing.

Kachi and coworkers¹ noted that the frequency of primary writing tremor was 5 to 6 Hz and that the tremor was improved by alcohol and propranolol. These characteristics are similar to essential tremor. Primidone has recently been found to be effective in reducing essential tremor.^{2,3} The drug has not been shown to be effective in other movement disorders. The efficacy of primidone in primary writing tremor further indicates that this entity is a subtype of essential tremor.

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The Flick Sign in Carpal Tunnel Syndrome

Sir: We read with interest the paper by Dr WEM Pryse-Phillips in which the accuracy of the "flick sign" in predicting the presence of carpal tunnel syndrome was assessed. He found that 93% of patients with electrodiagnostically proven carpal tunnel syndrome admitted to flicking the affected wrist and hand in an effort to relieve the discomfort. The false positive rate was under 5%. Therefore, the flick sign was found to be extremely sensitive and specific for the diagnosis of carpal tunnel syndrome. In the discussion section of his paper, Dr Pryse-Phillips indicated that such a reliable clinical diagnostic test could be valuable in areas where electrodiagnosis is not available.

To assess the accuracy of this sign in our EMG lab, patients referred over the last four months with hand pain or dysaesthesias were routinely asked what they did with their hand(s) to relieve the discomfort. If they did not volunteer that they flicked their wrist(s), they were specifically asked. The electrodiagnostic criteria for the diagnosis of carpal tunnel syndrome were essentially the same as those used by Dr Pryse-Phillips except that we routinely use the median palmar sensory latency across the wrist. A latency of greater than 2.2 milliseconds over a distance of 8 cm is considered to be abnormal.

The diagnosis of carpal tunnel syndrome was made in 56 patients. Only 14 (25%) demonstrated the flick sign. Nine patients demonstrated the flick sign without evidence of carpal tunnel syndrome. Seven of these demonstrated no pertinent electrophysiological abnormalities, and two had cervical radiculopathy. The false positive rate was 39%.

We found that the sign was neither sensitive nor specific for carpal tunnel syndrome. We have no explanation for our different results, but the flick sign is not unlike other clinical signs of carpal tunnel syndrome in this regard. Pryse-Phillips notes that a positive Tinel's sign has been reported in 0% to 89% of patients.

It is our feeling that carpal tunnel syndrome can produce a variety of upper extremity complaints, and that no single clinical sign is of sufficient diagnostic accuracy. Surgery is best reserved for patients with electrically proven carpal tunnel syndrome.

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- ¹Pryse-Phillips WEM. Validation of a diagnostic sign in carpal tunnel syndrome: *J Neurol Neurosurg Psychiatry* 1984;47:870-2.

Pryse-Phillips replies:

I am both surprised and disappointed that Dr Krendel and his colleagues so signally failed to verify my observations on the Flick Sign in Carpal Tunnel Syndrome (CTS). Presumably, our different findings must be due to patient populations, patient selection, or interpretation of the sign.

Apart from the absence of black people in my patient group, I would suppose our patient populations to be similar. Whether any learned pattern of hand movement is more common in either population is an ethnological question without answer.

Dr Krendel's false positive rate of 39% presumably refers to his nine patients with a positive flick sign but with negative electrophysiological tests for CTS. I included five such patients in my series and am aware that many patients with CTS have clinical symptoms but no obvious EMG findings (8% in Kimura's series¹). In many such cases, CTS is nevertheless the correct diagnosis and the false positive rate quoted may be fallacious.

The selection of patients with hand pain as a leading symptom may also explain in part the discrepancy in our figures since I rely more upon acroparaesthesia in the diagnosis of CTS rather than pain, heaviness and numbness; my clinical impression is that the flick sign correlates well with acroparaesthesiae while hand pain (as with rheumatoid arthritis, or old fracture) inhibits movements.

The interpretation of physical signs is a subjective matter. I do not know how much hand movement had to occur for Dr Krendel and his colleagues to record a positive flick sign but presumably it was a good deal