

How Do I Examine for Re-Emergent Tremor?

Joseph Jankovic, MD*

Abstract: Although rest tremor is the typical form of tremor associated with Parkinson's disease (PD), particularly the tremor-dominant subtype,¹ parkinsonian patients may also exhibit postural tremor. In many parkinsonian patients, this postural tremor emerges after a latency of a few seconds or even minutes. In our original description, we coined the term "re-emergent tremor" to differentiate this postural tremor from essential tremor, which occurs without any latency, and to link it to PD rest tremor that is "reset" after some latency when a new holding posture is assumed.² The relationship of this re-emergent tremor to the typical rest tremor is supported by the observation that this tremor shares many characteristics with the typical rest tremor, such as the same, 3 to 5-Hz frequency, occasional supinating-pronating component, and relatively good response to dopaminergic therapy. Rarely, postural tremor, occurring after a brief (2–4 seconds) latency can be seen even without observable rest tremor.³ In most patients with PD, it is the postural (re-emergent) tremor that is more troublesome for them than the typical rest tremor, because this re-emergent tremor interferes with their ability to hold objects, such as newspapers, against gravity and results in spilling of liquids. Postural tremor of PD is often misdiagnosed as essential tremor, and this diagnostic challenge can be further confounded when both conditions coexist.⁴ When that occurs, the postural tremor is present without latency, although the amplitude may gradually increase as the underlying re-emergent tremor becomes more evident.

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Parkinson's Disease Center and Movement Disorders Clinic, Department of Neurology, Baylor College of Medicine, Houston, Texas, USA

***Correspondence to:** Dr. Joseph Jankovic, Professor of Neurology, Distinguished Chair in Movement Disorders, Director, Parkinson's Disease Center and Movement Disorders Clinic, Department of Neurology, Baylor College of Medicine, 7200 Cambridge, Suite 9A, Houston, TX 77030-4202; E-mail: josephj@bcm.edu

Supporting information may be found in the online version of this article.

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Supporting Information

Video S1. This is a man aged 56 years with a 4-year history of predominantly left hand tremor, which was previously diagnosed as essential tremor, but there was no improvement with propranolol or primidone. Although the tremor is present when he is resting in a sitting position, when lying down, and when walking, he is most bothered by the left hand tremor when he attempts to hold objects and when he is building ship models. In addition to tremor, he has bradykinesia that is moderate in

the left hand and foot and mild in the left arm and left leg as well as decreased left arm swing. He obtains partial improvement of his tremor with carbidopa/levodopa (25 mg/250 mg) 3 times daily, but higher doses are associated with marked nausea. He is being considered for right subthalamic nucleus deep-brain stimulation. The video shows the typical parkinsonian rest tremor with oscillatory movement of the left wrist, which transiently disappears when the patient outstretches his hands in front of him or holds his arms in a “wing-beating” position. After a latency of a few seconds, the tremor reappears and persists while the patient holds his arm against gravity. The tremor also interferes with performance of rapid succession movements in the fingers, and it persists during walking.