

Re-emergent tremor in a patient with Parkinson's disease

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DESCRIPTION

A 62-year-old woman had a 3-year history of left leg resting tremor. The tremor was initially present when she was sitting. Two years later, she also developed resting tremor of her left hand. Her hand tremor is slow (4–6 Hz), involving the thumb, fingers or wrist. The tremor is also present when she was maintaining a posture (eg, outstretched hand) with a delayed onset of 2–4 s, called 're-emergent tremor' (score of 35 in the Movement Disorders Society-Unified Parkinson's Disease Rating Scale (MDS-UPDRS part III)), [video 1](#)). Her family history was negative for neurological disorders. Brain MRI findings were normal. The uptake of ¹²³I-ioflupane single-photon emission CT was significantly reduced in both putamina with an asymmetrical pattern (right>left) ([figure 1](#)). She was diagnosed as having Parkinson's disease (PD)

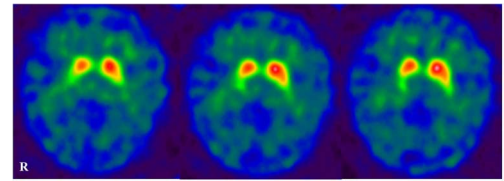


Figure 1 ¹²³I-ioflupane single-photon emission CT scan showing asymmetrical reduction of tracer uptake in both putamina (right>left).

and started on 250 mg of levodopa/benserazide per day. She still reported that her left hand was still shaking, thus, medications were titrated to levodopa/benserazide 450 mg/day, entacapone 300 mg/day, amantadine 150 mg/day and zonisamide 50 mg/day. Her bradykinesia, resting tremor and postural tremor improved (score of 14 on MDS-UPDRS part III, [video 2](#)).



Video 1 This is a 62-year-old woman with a 3-year history of predominantly left hand tremor. The tremor is present when she is in a sitting position, and she is also bothered by the re-emergent tremor when she maintains an outstretched posture.



Video 2 The patient resting and re-emergent tremors were markedly improved by treatment with dopaminergic agents.



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Resting tremor is a cardinal feature of PD, but other types of tremor including postural and kinetic tremors may also occur. In people with parkinsonism, postural tremor emerges after a variable latency (1–47, mean=9.4) in seconds with a frequency typical of parkinsonian tremor (4–7 Hz).¹ Jankovic *et al*¹

Learning points

- ▶ Although resting tremor is a typical form of tremor associated with Parkinson's disease, people with parkinsonism may also develop postural tremor.
- ▶ In people with parkinsonism, postural tremor appears after a latency while maintaining a posture, which is termed re-emergent tremor.
- ▶ Re-emergent tremor has a similar frequency to typical resting tremor and may respond well to dopaminergic therapy.

defined it as re-emergent tremor. Postural tremor of PD can be misdiagnosed as essential tremor (ET).² The differential diagnosis of PD from ET in our patient was however, not difficult because of the presence of clearly observable resting tremor. This re-emergence is a key feature that helps differentiate PD from ET. Early recognition of re-emergent tremor and treatment are required.

Contributors KN cared for the patient in the outpatient settings. NH and YO reviewed the manuscript and provided suggestions. All the authors contributed to the writing of the manuscript, and read and approved the final version of the manuscript.

Competing interests None declared.

Patient consent Obtained.

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