

# Complex periodic limb movements during sleep or partial epileptic seizures?



**Table** Sleep measures before and after dopaminergic agonist treatment

	Before treatment, night 1	Before treatment, night 2	Under treatment <sup>a</sup>
Total sleep time, min	297	303	422
Sleep efficacy, %	46	52	78
<b>Latency to</b>			
Sleep onset, min	270	197	41
REM sleep onset, min	230	180	189
<b>Sleep stages, %</b>			
N1	33	25.7	20
N2	28	32.3	28
N3	3.7	20.4	22
REM sleep	35.3	21.6	30
Periodic leg movements/h	88	67	7
Periodic leg movements-related arousals/h	76	49	4

<sup>a</sup>Pramipexole 0.18 mg/night.

A 69-year-old woman had insomnia, restless legs syndrome, and violent movements during sleep; she had had a generalized seizure several years previously. She underwent 4 days of video-EEG investigation for these movements (table, and figure e-1 on the *Neurology*<sup>®</sup> Web site at Neurology.org). There was no epileptic activity, but repetitive, stereotyped movements (88 movements/hour; movement duration: 2.5 seconds) occurred only during sleep, which were typical of periodic leg movements but associated with atypical, polyphasic hand cycling/rubbing movements (see video). This complex motor pattern might be confused with a focal epileptic seizure.

Treatment with pramipexole (0.18 mg/night) alleviated the insomnia and movements, arguing further for complex periodic leg (and arm) movements of sleep.

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