Right- versus Left-onset Parkinson's Disease: Other Psychometric Parameters

Sir,
We read the findings by Adwani et al.\textsuperscript{[1]} with great interest. Differences in motor\textsuperscript{[2]} as well as nonmotor\textsuperscript{[3]} manifestations of Parkinson's disease (PD) have been observed in right-sided (R-PD) versus left-sided (L-PD) disease. However, some of these associations have been debated in the literature.

We recently recruited a number of PD patients ($n = 31$) as part of an ongoing neurocognitive study. The onset of PD was on the right in 16 patients and on the left in 15 patients. Both groups were of similar age (R-PD mean 65.5 years; L-PD mean 68.7 years) and male-to-female ratio (R-PD 75% males; L-PD 87% males). All patients were on dopamine replacement therapy.

Handedness was assessed by the Edinburgh handedness inventory.\textsuperscript{[4]} Except one patient who was ambidextrous, all patients were right handed. We assessed whether handedness-symptomatic side mismatch (i.e., left-sided symptom onset in a right-handed individual) who delay the interval between symptom onset and diagnosis. R-PD patients were diagnosed 2.1 ($\pm1.0$) years after symptoms onset, compared with 1.6 ($\pm0.8$) years in L-PD patients; this difference was not statistically significant ($P = 0.15$).

Mild cognitive impairment was equally distributed between R-PD (50%) and L-PD (53%) patients. Disease duration was similar between the two groups: 6.3 ($\pm3.5$) years for R-PD and 8.3 ($\pm5.3$) years for L-PD ($P = 0.23$). The extent of motor deficit was not different between the two groups as assessed by the Unified Parkinson's Disease Rating Scale (UPDRS-II) (14.7 vs. 17.3, $P = 0.39$, respectively) and the UPDRS-III (31.6 vs. 38.6, $P = 0.13$, respectively). The severity of symptoms of anxiety and depression (as assessed by the Hospital Anxiety and Depression Scale) was also similar between R-PD (mean 9.9 points) and L-PD (mean 9.7 points) patients ($P = 0.95$).

In conclusion, we found no difference in R-PD versus L-PD patients in relation to motor or psychological symptoms in our sample. Further insights may be obtained by comparing drug-naïve versus medicated PD patients as well as inclusion of PD patients with established PD-dementia.

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Conflicts of interest
There are no conflicts of interest.
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REFERENCES

1. Adwani S, Yadav R, Kumar K, Chandra SR, Pal PK. Neuropsychological profile in early Parkinson’s disease: Comparison between patients with right side onset versus left side onset of motor symptoms. Ann Indian Acad Neurol 2016;19:74-8.

2. van der Hoorn A, Bartels AL, Leenders KL, de Jong BM. Handedness and dominant side of symptoms in Parkinson’s disease. Parkinsonism Relat Disord 2011;17:58-60.

3. Tomer R, Levin BE, Weiner WJ. Side of onset of motor symptoms influences cognition in Parkinson’s disease. Ann Neurol 1993;34:579-84.

4. Oldfield RC. The assessment and analysis of handedness: The Edinburgh inventory. Neuropsychologia 1971;9:97-113.

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A Case of Kennedy’s Disease from India

Sir,

We report a case of an Indian patient who presented to us with progressive limb weakness and bulbar symptoms. To the best of our knowledge, it is the first case report of Kennedy’s disease from India.

A 62-year-old male presented with a history of insidious onset, gradually progressive, symmetric weakness, and sensory symptoms of extremities for the past 7 years, followed by hand tremors for the last 2 years, and dysphagia since 2 weeks with a history of abnormal twitching movements (over extremities, trunk, and face), thinning of limbs, muscle cramps, fatigability, and loss of libido and diabetes mellitus for the last 3 years. Positive family history of similar complaints in two of his brothers and one maternal uncle was present.

He had bilateral gynecomastia with the loss of pubic hairs and testicular atrophy. Bilateral facial weakness with facial and chin fasciculations, tongue atrophy, and palatal weakness was present.

There was symmetric proximal as well as distal weakness of all extremities with generalized areflexia and absent plantar response. Bilateral postural hand tremors were seen. Sensory system examination revealed decreased sense of touch and pain (25%) distally in lower limbs.

Nerve conduction study (NCS) revealed asymmetric bilateral involvement of motor nerve conduction parameters, in the form of absent to decrease compound muscle action potentials (CMAPs) involving upper limb more than lower limb with normal motor distal latencies and conduction velocities. Sensory NCSs revealed nonrecordable or reduced responses.

Figure 1: Pedigree chart of the patient
Figure 2: Tongue atrophy