

S1 Table. Clinical and demographic information on members of a South African family with Parkinson’s disease

	Affected					Unaffected			
Individual ID	III-8	III-7	IV-2	III-6	III-2	III-4	IV-1	III-1	III-5
Gender	Male	Male	Male	Female	Female	Male	Male	Female	Male
Age in 2021 (years)	66	72	47	75	83	72	46	74	76
Age at evaluation	55	60	44	72	77	62	35	68	67
Age at onset (years)	48	42	37	70	75	N/A	N/A	N/A	N/A
Childhood symptoms	Reported to have walked on toes since childhood	None	None	None	None	N/A	N/A	N/A	N/A
Initial symptoms	Muscle spasm in left arm, poor balance, walking on toes	Impaired concentration Weakness of legs, and difficulty walking	Difficulty with walking and balance	Cramping lower legs	Difficulty with fine motor ADL; left hand tremor	N/A	N/A	N/A	N/A
Olfaction	Impaired	Normal	Always poor	Normal	Impaired	N/A	N/A	N/A	N/A
Excessive sweating	No	Yes	No	No	No	N/A	N/A	N/A	N/A

RBD	No	No	No	No	Yes	N/A	N/A	N/A	N/A
Orthostatic hypotension	Yes	Onset age 45	No	No	No	N/A	N/A	N/A	N/A
Bladder function	Mild difficulty	Normal	Normal	Normal	Normal	N/A	N/A	N/A	N/A
Constipation	Yes	None	No	No	Yes	N/A	N/A	N/A	N/A
Sleep impairment	No	Yes	No	No	Yes	N/A	N/A	N/A	N/A
Dystonia	Initially walked on toes. Dystonia of left leg after medication	Dystonic flexion of left arm when walking	Facial	No	No	N/A	N/A	N/A	N/A
Tremor	Developed later, predominantly action tremor, with intention component	Action/intention	No	No	Initial complaint	N/A	N/A	N/A	N/A
Bradykinesia	Marked, asymmetrical, predominantly upper limbs	Markedly asymmetrical in upper and lower limbs	Mild bilateral	Mild bilateral	Mild bilateral	N/A	N/A	N/A	N/A
Rigidity	Bilateral cogwheel	Marked asymmetry	Mild bilateral, asymmetrical	Normal tone	Unilateral	N/A	N/A	N/A	N/A
Gait	Shuffling gait, with absent arm swing	Broad-based, diminished arm swing	Mild slowing	Normal	Slowed	N/A	N/A	N/A	N/A
Additional findings	Diminished vibration sense in toes	Diminished vibration and loss of joint position sense in toes. No	Micrographia	None	None	N/A	N/A	N/A	N/A

		evident axonal or demyelinating changes in tibial, peroneal or sural conductions.							
Total daily dose levodopa (mg)	1000	600	0	0	0	N/A	N/A	N/A	N/A
Levodopa responsive	Yes	Yes	N/A	N/A	Not known	N/A	N/A	N/A	N/A
Blood pressure	No orthostatic drop	No orthostatic drop	No orthostatic drop	No orthostatic drop	No orthostatic drop	N/A	N/A	N/A	N/A
Reflexes	Hyperreflexia present	Hyperreflexia in lower limbs	Hyperreflexia in lower limbs, right > left	Normal	Normal	N/A	N/A	N/A	N/A
Brain CT scan	No abnormality except for internal capsule lacune	Not done	Not done	Not done	Not done	N/A	N/A	N/A	N/A
UPDRS	41	37	16	11	15	N/A	N/A	N/A	N/A
MOCA	26	27	30	28	Not done	N/A	N/A	N/A	N/A

ADL, Activities of Daily Living; RBD, REM sleep behavior disorder; MOCA, Montreal Cognitive Assessment; N/A, not applicable; UPDRS, Unified Parkinson Disease Rating Scale