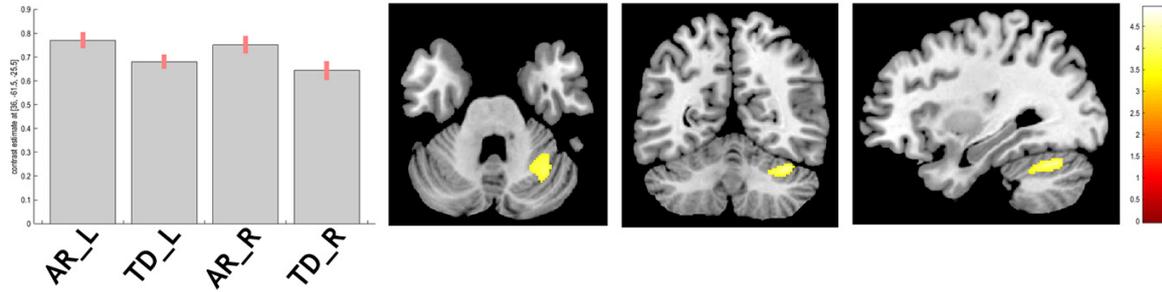


Supplementary material



Supplementary Figure S1. Whole-brain analysis of grey matter volume differences between akineto-rigid and tremor-dominant forms of PD. Statistical Parametric Maps thresholded for presentation purposes at $p < 0.001$, uncorrected for multiple comparisons, overlaid on standard T1-weighted image in Montreal Neurological Institute space. Bar plots represent the contrast estimates for the cerebellar finding across subgroups of PD patients. Findings in the parietal operculum left not shown in the figure. Abbreviations: AR_L – akineto-rigid symptoms on the left; AR_R – akineto-rigid symptoms on the right; TD_L – tremor-predominance on the left; TD_R – tremor-predominance on the right.

Supplementary Table S1: Main effects analysis – volume differences. Trends are denoted with a plus sign +

Main effects	Region	Side	MNI coordinates (mm)			P-value (FWE-corr)
			x	y	z	
AR_PD<TD_PD	Cerebellum	R	36	-62	-26	$p = 0.5^+$
	Parietal operculum	L	-30	-29	21	$p = 0.4^+$

Supplementary Table S2: Main effects analysis after exclusion of female healthy controls – rate of gray matter volume change. Trends are denoted with a circle o

Main effects	Region	Side	MNI coordinates (mm)			P-value (FWE-corr)
			x	y	z	
PD<HC	Parahippocampal gyrus	R	30	-32	-15	p = 0.08 ^o
	Parahippocampal gyrus	L	-21	-34	-12	p = 0.77 ^o
	Anterior insula	R	34	12	-3	P = 0.4 ^o
	Anterior insula	L	-30	16	-12	P = 0.049
	Precuneus	R	10	-57	38	p = 0.02
	Precuneus	L	-14	-44	44	p = 0.3 ^o
	Middle temporal gyrus	R	30	-32	-15	p = 0.08 ^o
	Middle temporal gyrus	L	-48	-51	2	p = 0.035