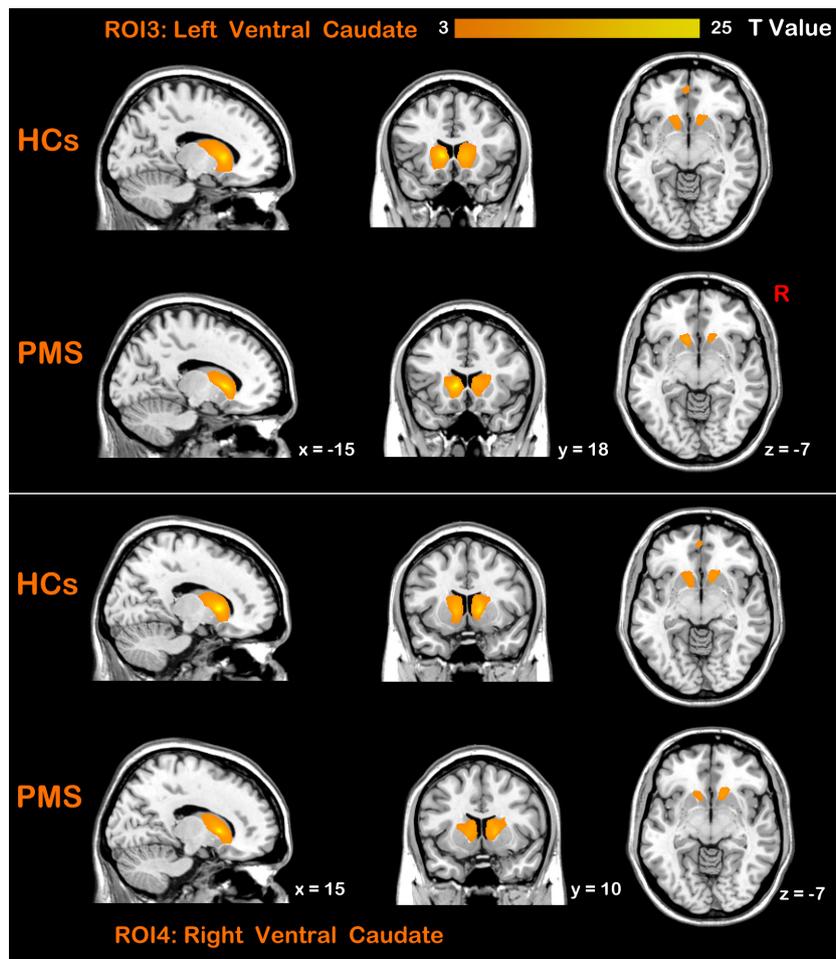**Figure S1** Bilateral dorsal caudate subregions (ROI 1–2)-based structural covariance patterns in both PMS patients and HCs. ROI, region of interest; PMS, premenstrual syndrome; HCs, healthy controls; R, right.

Figure S2 Bilateral ventral caudate subregions (ROI 3–4)-based structural covariance patterns in both PMS patients and HCs. ROI, region of interest; PMS, premenstrual syndrome; HCs, healthy controls; R, right.

Table S1 Main effect of the group on LFCD and LRFCD by two-way ANOVA

Item	Brain regions	L/R	BA	MNI coordinates (mm)			F value	Cluster P value
				x	y	z		
LFCD	MCC	L	23	−6	−18	42	13.47	<0.05
LRFCD	PreCG	L	6	−39	6	39	11.98	<0.05

L, left; R, right; BA, Brodmann area; MNI, Montreal Neurological Institute; LFCD, local functional connectivity density; LRFCD, long-range functional connectivity density; MCC, middle cingulate cortex; PreCG, precentral gyrus; ANOVA, analysis of variance.

Table S2 Interaction effects between the group and frequency band by two-way ANOVA

Item	Brain regions	L/R	BA	MNI coordinates (mm)			F value	Cluster P value
				x	y	z		
LFCD								
Cluster 1	Caudate	L	–	−18	−15	24	12.79	<0.05
	Putamen	L	–	−24	−3	6	11.59	
	Pallidum	L	–	−24	−6	3	10.37	
	Thalamus	L	–	−21	−12	6	11.66	
LRFCD	OFC	R	11	30	63	0	19.30	<0.05

L, left; R, right; BA, Brodmann area; MNI, Montreal Neurological Institute; LFCD, local functional connectivity density; LRFCD, long-range functional connectivity density; OFC, orbitofrontal cortex; ANOVA, analysis of variance.