

Lewy body constipation

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Objectives

■ We describe a newer concept “**Lewy body constipation**”, i.e., constipation due to Lewy body diseases (PD, DLB), with minimum extra-GI symptoms, such as REM sleep behavior disorder (RBD), overactive bladder, mild frontal executive disorder, orthostatic hypotension (also called pure autonomic failure [PAF]) etc., but with little or no gait abnormality.

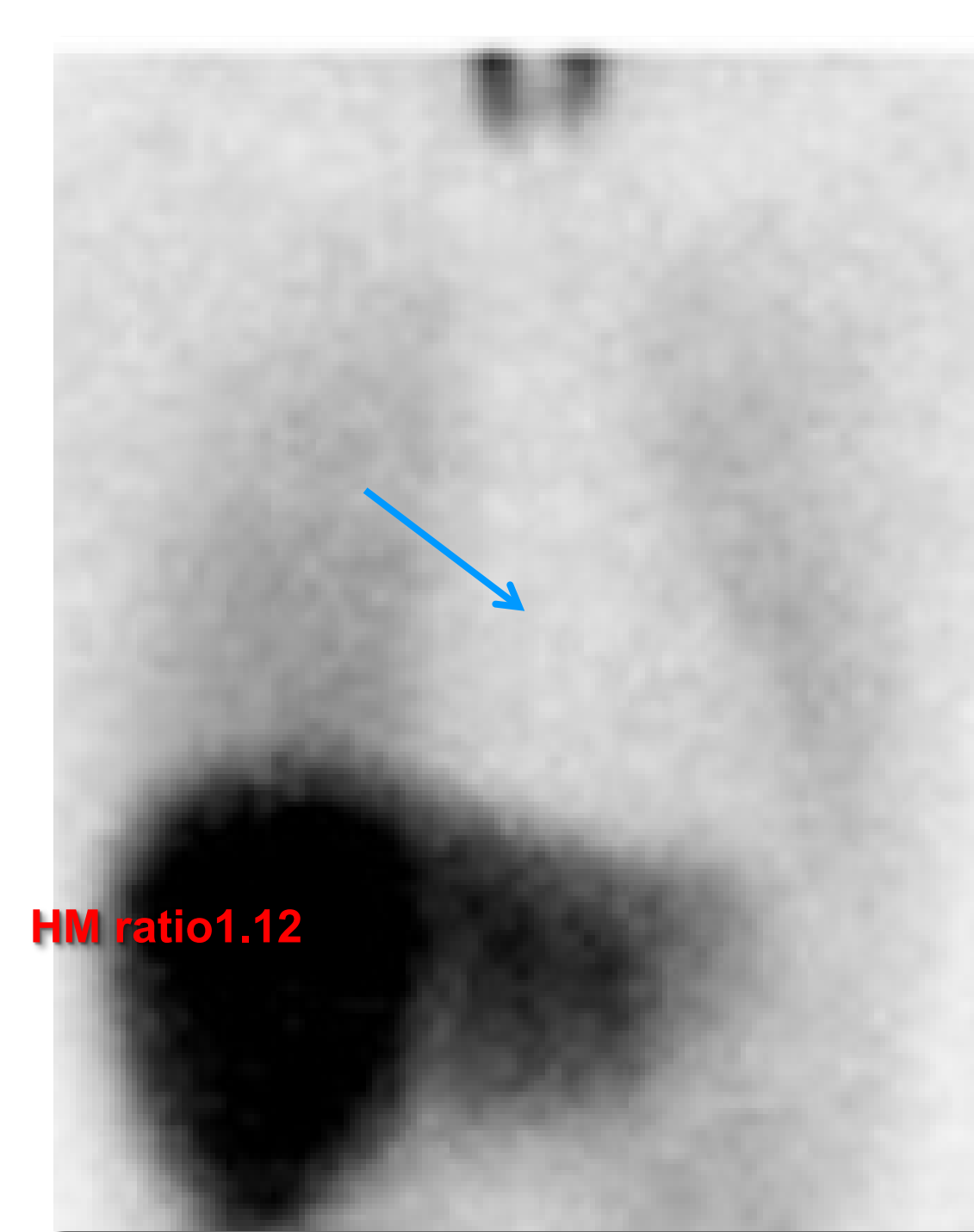
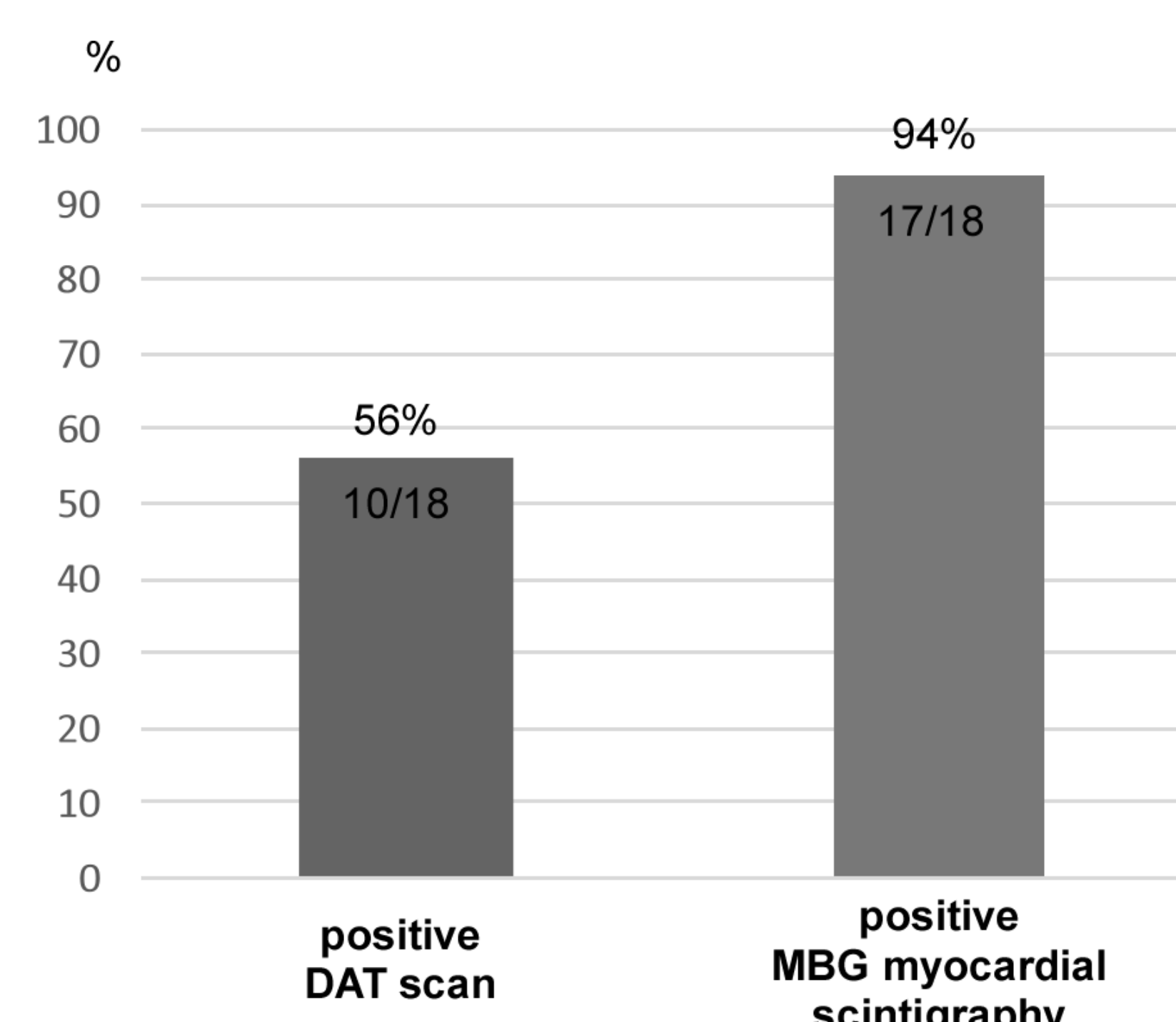
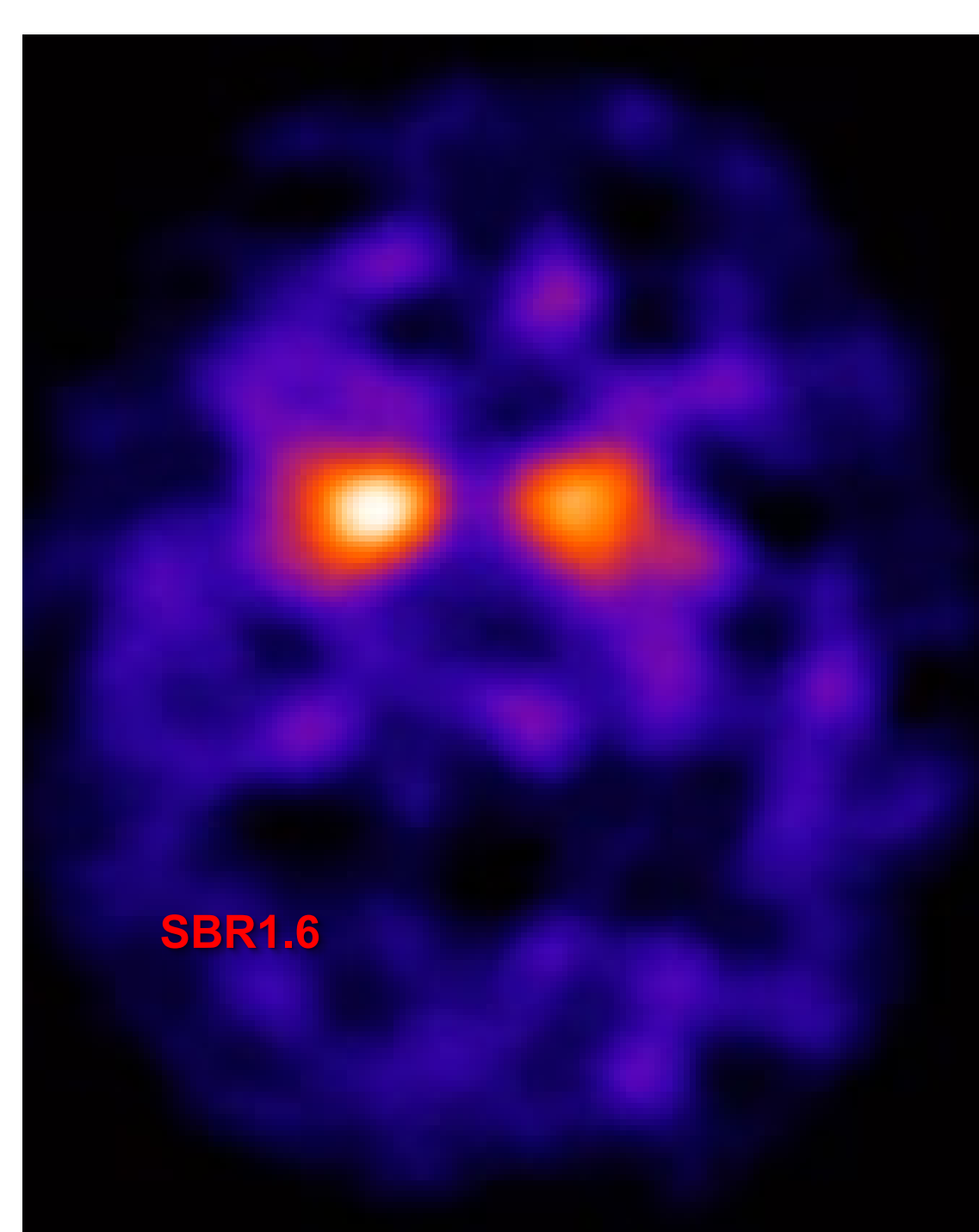
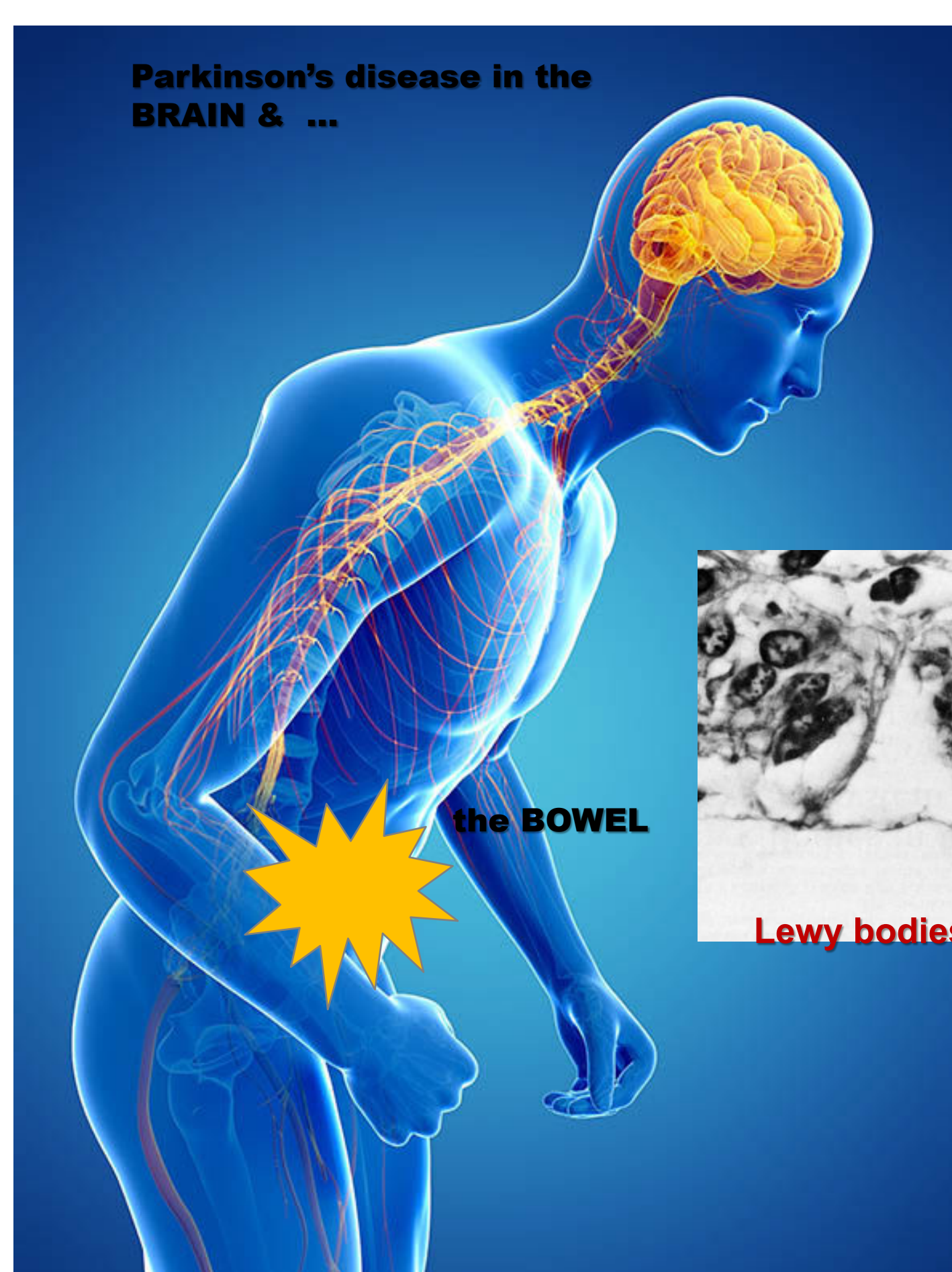
Methods

■ This is a prospective cohort study: recruiting period, 5.0 years; prospective follow-up period, 5.5±3.0 years, visit at least once a year. We recruited 745 referred subjects, and the inclusion criteria were: at least one of PD/DLB's known nonmotor features, as described above. We performed two neuroimaging tests, i.e., dopamine transporter (DAT) scanning and metaiodo-benzylguanidine (MIBG) myocardial scintigraphy.

Results

■ Only 18 patients fulfilled these criteria; their characteristics were: **elderly** (mean age 75.5 years), **with long histories** (onset 61.0 years; duration 14.5 years), **male dominance** (14 men, four women). The patients' neurologic diagnoses were **constipation/RBD** in 10, **constipation/RBD/PAF** in six, and **constipation/PAF** in two. During the follow-up period, seven patients developed PD or DLB. An abnormal MIBG result was noted in 94%, and an abnormal DAT result was noted in 56%.

patient & clinical forms	autonomic-sleep disorder				cognitive disorder				gait difficulty		neuroimaging				
	sex	age at exami- nation	age at onset	duration	autonomic	sleep	duration	MMSE/FAB	halluci- nation	duration	HY grade	levodopa	DAT	MIBG	SPECT
		(years)	(years)	(years)	consti- pation	over- active bladder	postural hypotension (mmHg)	REM sleep behavior/notice disorder (RBD)				equivalent dose (*100mg /day)	SBR (DLB)	delayed HM ratio	occipital hypo- perfusion (eZis)
responsible site for symptom					PNS	CNS	PNS	CNS	CNS	CNS	CNS	CNS	PNS	CNS	
1 Constipation-RBD,PAFM		67	53	14	1		41	1	29	17			1.89	1.74	+
2 Constipation-RBD,PAFF		67	50	17	1	1	22	1	24	9	1	2	0.73	2.83	+
3 Constipation-RBD	M	71	50	21	1		-	1	25	13	1	1	1.92	1.29	+
4 Constipation-RBD	M	72	68	4	1		-	1	27	13			5.92	1.66	+
5 Constipation-RBD	M	72	55	17	1	1	-	1	30	9	1	1	2.62	1.04	+
6 Constipation-RBD	M	72	61	11	1		-	1	26	13			2.11	1.42	+
7 Constipation-RBD	M	72	62	10	1	1	-	1	26	16			0.84	1.28	+
8 Constipation-RBD	M	73	63	10	1	1	-	1	25	10			3.42	1.28	+
9 Constipation-PAF	M	74	63	11	1		78	-	29	16			2.45	1.19	+
10 Constipation-RBD	M	74	70	4	1	1	-	1	28	15			3.32	1.19	+
11 Constipation-RBD,PAFF		75	59	16	1	1	30	1	26	14			4.05	1.48	+
12 Constipation-RBD,PAFM		77	40	37	1	1	42	1	27	14			5.17	1.47	-
13 Constipation-RBD	M	77	74	3	1	1	-	1	29	15			4.26	1.61	+
14 Constipation-RBD,PAFM		80	49	31	1	1	133	1	28	13	1		1.36	1.01	+
15 Constipation-RBD,PAFM		81	78	3	1	1	39	1	28	16	1	1	3.12	1.17	+
16 Constipation-RBD	F	83	39	44	1	1	-	1	28	16	1	1	2.38	1.19	np
17 Constipation,PAF	M	86	85	1	1	1	25	-	27	16			4.3	1.3	np
18 Constipation-RBD	F	86	79	7	1	1	-	1	23	14			1.85	1.09	+



Interpretation & Conclusion

■ 18 patients (4.2% of all LBD) started with GI dysfunction with minimum extra-GI symptom, with mean duration being 14.5 years. The exact reasons for these remain unclear. However, GI dysfunction may reflect myenteric pathology, which is commonly affected in LBD. Therefore, in some patients, LB (Lewy body) pathology may start at bowel.

■ 70% of PD patients have GI dysfunction, and GI emergency (ileus etc.) does occur. Further, DLB has show more severe GI dysfunction than PD. Recently DLB is estimated to occur in one in 15 octogenarians, which is not uncommon.

■ Our results suggest that “**Lewy body constipation**” should be listed in elderly constipation, since LBD is not uncommon in the elderly. “LBD” needs care in order to avoid GI emergency such as intestinal pseudo-obstruction, intussusception, volvulus, stercoral ulcer, etc.