

Parkinson's Disease and Narcolepsy

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Objective: To study Excessive Sleepiness (ES) with other clinical features of Narcolepsy in Veterans with Parkinson's disease (PD).

Background: Excessive daytime sleepiness and sleep attacks are common in PD. These symptoms are also described in Narcolepsy. There is evidence to support an increasing loss of hypocretin cells (Hcrt) in the brains of PD patients with disease progression. However, the understanding of clinical association of Parkinson's disease and Narcolepsy remains unclear. Awareness of clinical narcoleptic type phenomenon in PD is important for optimal management and safety considerations in these patients.

Design/Methods: 100 consecutive PD patients were assessed with respect to subjective sleepiness using Epworth Sleepiness Scale (ESS). They were also questioned using our standard questionnaire regarding other associated clinical features of narcolepsy: Cataplexy (2 items) Hypnagogic and/or Hypnopompic hallucinations (2 items), Sleep paralysis (3 items). The responses were compared between the sleepy (ESS>10) and non-sleepy (ESS<10) subjects.

Results:

Sleepy (N=55)

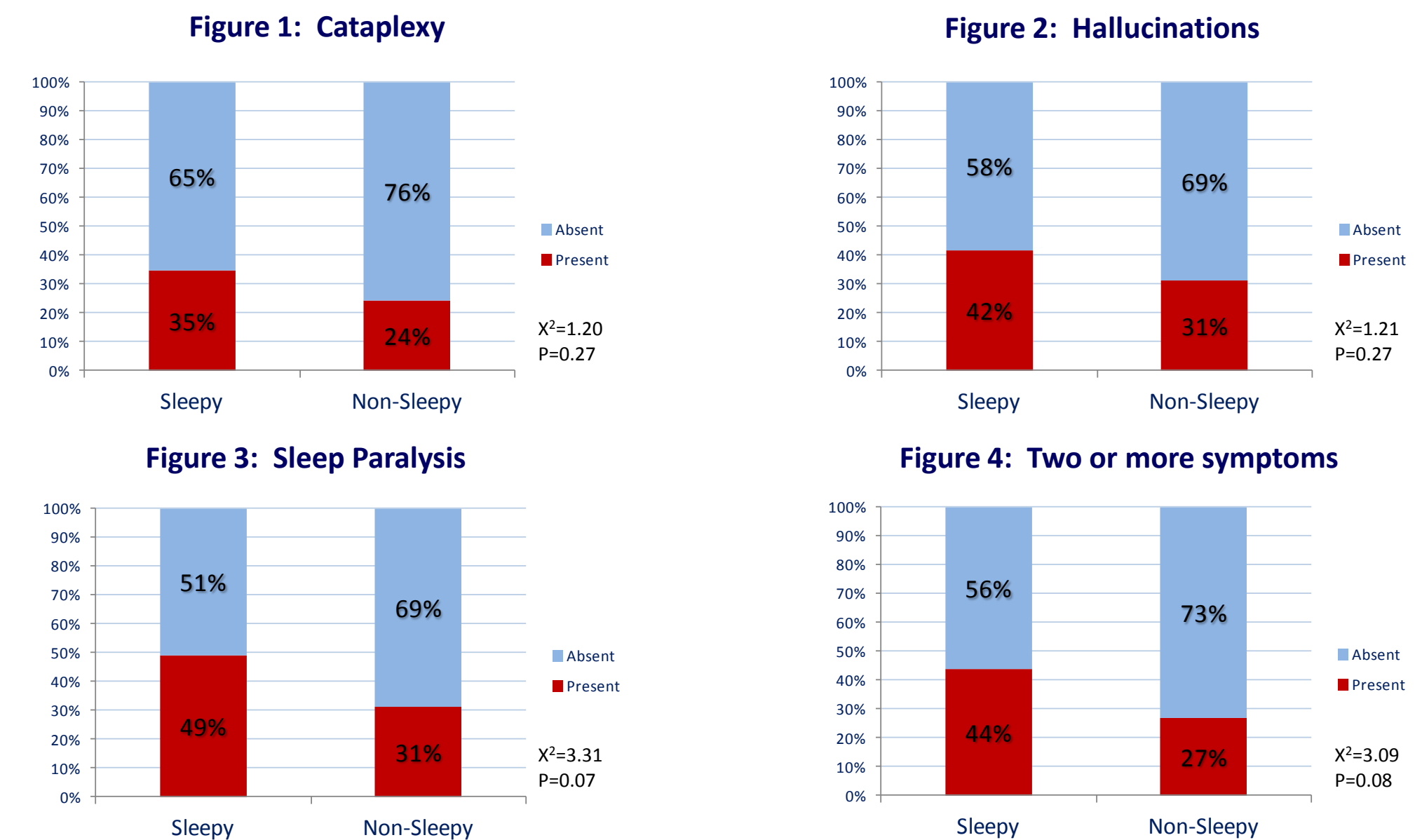
ESS > 10: 19 endorsed symptoms suggestive of cataplexy, 23 of hypnagogic and/or hypnopompic hallucinations, 27 of sleep paralysis. 24/55: reported two or more of the above mentioned symptoms.

Non-Sleepy (N=45)

ESS ≤ 10: 11 endorsed symptoms suggestive of cataplexy, 14 of hypnagogic and or hypnopompic hallucinations, 14 of sleep paralysis. 12/45: reported two or more of the above mentioned symptoms.

Table 1: Demographic distribution of study subjects

Demographics	N (All)	Sleepy	Non-Sleepy
Gender			
Men	97	53 (96.4%)	44 (97.8%)
Women	3	2 (3.6%)	1 (2.2%)
Total	100	55 100%	45 100%
Ethnicity			
White	86	49 (89.1%)	37 (82.2%)
Black	9	4 (7.3%)	5 (11.1%)
Hispanic	5	2 (3.6%)	3 (6.7%)
Age (std dev)	72.5 (9.7)	72.8 (10.3)	72.1 (9.0)
Hoehn & Yahr			
Mean	2.7(0.8)	2.9 (0.8)	2.6 (0.7)
Median	2.5	3.0	2.5



Conclusions: Symptoms suggestive of Narcolepsy are common in Veterans with Parkinson's disease. Although cataplexy and other associated symptoms of Narcolepsy are more common in those suffering from excessive sleepiness, they are also frequently endorsed by those not reporting excessive sleepiness. This phenomenon needs to be studied further.