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# THE INCIDENCE OF VOIDING DIFFICULITY AND CONSTIPATION IN PATIENTS WITH ESSENTIAL TREMOR COMPARED TO PARKINSON'S DISEASE

### Hypothesis / aims of study

There is a well described body of literature regarding the high incidence of voiding dysfunction (35-70%), bowel dysfunction (33%) and erectile dysfunction (60%) in patients with Parkinson's disease (PD). Essential tremor (ET), present in 5% of adults, is often confused with PD. It is a movement disorder that becomes present with directed activity. The aim of this study was to compare and contrast the prevalence of voiding dysfunction, erectile dysfunction, and constipation in a population of patients with PD and ET.

# Study design, materials and methods

89 patients with PD or ET were identified through the department of Neurology. They each participated by completing a questionnaire documenting symptoms associated with voiding, stooling, and sexual activity.

## Results

89 total patients with PD or ET were identified. 61 patients had PD while 28 had ET. 48.3% of patients with PD and 14.3% with ET described voiding difficulty (p = 0.002). When questioned specifically, 82.4% of PD patients and 42.9% of ET patients had urinary urgency (p = 0.008). 87.6% and 53.6% of patients with PD and ET respectively had nocturia (p = 0.023). Of males with PD and ET, 41.2% and 37% of patients had erectile dysfunction (p = 0.26). Finally, 17.2% and 3.6% of patients with PD and ET had constipation (p = 0.094).

#### Interpretation of results

There is significantly lower incidence of voiding dysfunction in patients with ET compared to PD. This is significant overall, and for urgency and nocturia. ET patients are also less affected by constipation. There was no difference in sexual dysfunction between the two groups.

## Concluding message

PD and ET are different diseases with different underlying mechanisms that have different prevalences of voiding, sexual and gastrointestinal dysfunction.

Specify source of funding or grant	None
Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	Wake Forest IRB
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes