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URINARY QUESTIONNAIRE ANALYSIS IN PARKINSONIAN PATIENTS; AN EFFECT OF DOPAMINERGIC DRUGS

Background Recently dopaminergic drugs are the main therapy for patients with Parkinson's disease (PD). Most patients start to take the drugs while exact effects of dopaminergic drugs for urinary dysfunction are not ascertained. We tried to evaluate urinary dysfunction in PD by a detailed urinary questionnaire.

Methods We recruited 115 patients with PD including 52 men and 63 women, mean age 67 years, mean Hoehn and Yahr stage 3. All patients were taking dopaminergic drugs and they were divided into 3 groups; D: only l-dopa (D1,2), DP: l-dopa and pergolide (D1,2) and DB: l-dopa and bromocriptine (D2). They were given a urinary questionnaire (Chiba Questionnaire for Neurogenic Bladder, modified from IPSS). Statistics were analyzed by χ^2 test.

Results Seventy-seven percent of the patients had urinary symptoms including urinary incontinence in 48%. Filling disorder was more common than voiding disorder ($p < 0.05$). Urinary symptoms tended to increase with Hoehn and Yahr stage and age though there was no statistical significance. Night time frequency, urinary urgency ($p < 0.05$), urge incontinence, prolongation and urination shortly after voiding were more common in men, whereas daytime frequency and stress incontinence ($p < 0.01$) were more common in women. Group DB had filling disorder less commonly, and intermittency ($p < 0.05$), straining and sensation of residual urine ($p < 0.05$) more commonly than group D. Group DP had urination shortly after voiding less commonly than group D ($p < 0.05$).

Conclusion The results were in accord to previous reports showing urinary dysfunction is common in patients with PD. In addition we found that dopaminergic drugs could modulate urinary function both in filling and voiding phase in patients with PD.

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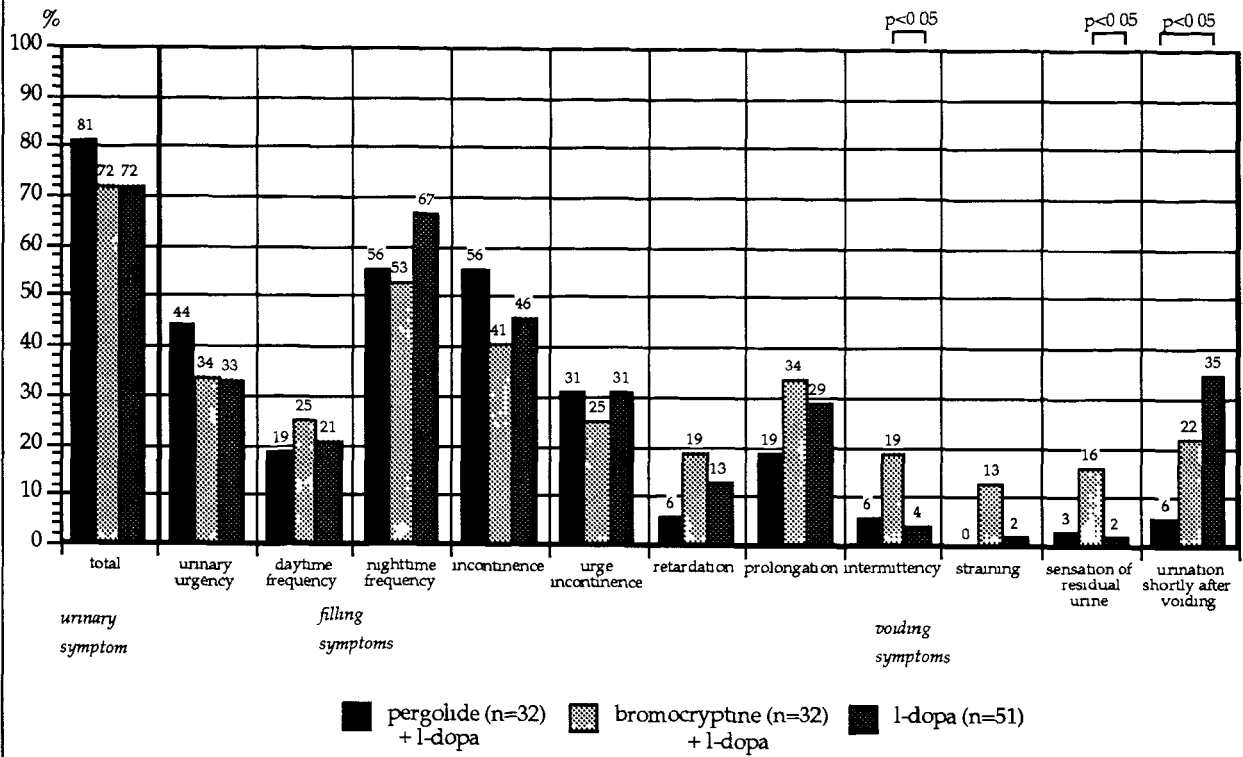


Figure Anti-Parkinsonian drugs and urinary symptoms