Parkinson's disease - can the occurrence of dysphagia be predicted?

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Parkinson's disease (PD) is a neurodegenerative α -synucleinopathy and the most common extrapyramidal disorder. This progressive condition is responsible for many different symptoms divided into motor and non-motor. One of the most underestimated manifestations of the disease is oropharyngeal dysphagia. Depending on source, the epidemiology of this phenomenon varies from 10 up to even 90% of patients. Precise assessment of swallowing impairment is crucial as the leading cause of death in PD is aspiration pneumonia due to swallowing disorders. The aim of the study was to objectively evaluate the prevalence and level of oropharyngeal dysphagia in PD patients and correlate this symptom with UPDRS - III and Munich Dysphagia Test - Parkinson 's disease (MTD-PD) as a screening tool. In the study 24 patients (11 females, 13 males) diagnosed with PD underwent clinical examination and fiberoptic endoscopic evaluation of swallowing (FEES) with the use of The Yale Pharyngeal Residue Severity Rating Scale for the outcomes. The endoscopic and clinical examination were conducted during patients' ON-phase obtained by the most suitable oral pharmacotherapy. 23 out of 24 patients were diagnosed with swallowing impairment after endoscopic evaluation. Outcomes were divided into 3 groups depending on the level of dysphagia. The Kruskal-Wallis H test and multiple (double-sided) comparisons revealed no statistically significant difference between UDPRS-III and FEES or MDT-PD results. However, analysis showed a positive tendency (p=0,13) in MDT-PD results among patients with moderate level of swallowing impairment compared to those with mild level of dysphagia (evaluated by FEES and The Yale Pharyngeal Residue Severity Rating Scale). Obtained results show lack of use of UPDRS - III as a tool for dysphagia assessment. FEES is a 'gold standard' examination of parkinsonian dysphagia. MDT-PD might be useful only in detection of more advanced level of swallowing impairment; however more research in this field is required.