

## **Integrated feeding assessment for early identification of oropharyngeal dysphagia and sarcopenia in patients with Parkinson's Disease.**

**Background:** Oropharyngeal dysphagia is a common symptom in neurodegenerative conditions such as Parkinson's Disease (PD). Sarcopenia is also a geriatric syndrome that is highly prevalent among PD patients and both these are associated with adverse health outcomes in elderly patients.

**Objectives:** To assess the prevalence of oropharyngeal dysphagia, sarcopenia and the correlation between the two in patients with Parkinson's Disease.

**Method:** A total of 19 patients from the Integrated Parkinson's Hub were referred to the Integrated Feeding clinic for a combined speech therapist and dietician review. Functional Oral Intake Scale (FOIS) was administered to assess the effectiveness of oral intake and the level of dysphagia. Subjective global assessment, body mass index and skeletal muscle mass index (SMI) were performed for assessment of nutritional status and sarcopenia. InBody S10 body composition analyzer was used to measure SMI. Measurement of hand grip strength, SARC- F and CFS scoring were done as part of Parkinson Hub workflow.

**Results:** The cohort of patients had a mean age of  $75.42 \pm 5.81$  and were predominantly of Chinese ethnicity (89.4%). There were 12 males and 7 females. 10 (52.6%) had a CCI >3 which indicates a 10-year survival of >54%. 36.84% (7) were noted to have mild dysphagia and 15.78% (3) had moderate dysphagia. 47.36% (9) patients had SARC-F  $\geq 4$  and 36.8% (7) were diagnosed to have sarcopenia based on the AWGS 2019 diagnostic criteria. A positive Pearson Correlation coefficient of 0.53 ( $p=0.045$ ) was noted between FOIS and SMI.

**Conclusion:** Swallowing impairment and sarcopenia are two important geriatric syndromes prevalent among patients with Parkinson's Disease across all stages. Early identification and prompt intervention will help in reducing adverse events and optimizing Parkinson therapy suited to the unique needs of the geriatric population.