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Elderly onset functional movement disorders: an overview from the Italian Registry of **Functional Motor Disorders**

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Introduction: Functional movement disorders (FMDs) are a frequent condition that affects patients with movement disorder. Generally described in young adults, their manifestation can be also associated to an elderly onset [1-2].

Objective: Aim of this study is to assess the prevalence and the clinical phenotype of elderly onset FMDs and to compare this sample to younger onset patients in order to investigate the possible risk factors.

Methods: We recruited patients with a clinically definite diagnosis of FMDs from the Italian Registry of Functional Motor Disorders. For each patient, we performed an extensive clinical assessment. For elderly onset, we set a chronological cut-off at 65 years or older. Multivariate regression models were implemented in order to estimate the adjusted odds ratio (OR; 95% confidence interval) of having an elderly onset FMDs related to socio-demographic and clinical characteristics.

Results: Out of 410 FMDs patients, 9% (n =34) had an elderly FMDs onset, with a mean age at onset of 70.9 years. They exhibited isolated FMD in 67.7%. The most frequent phenotype was tremor in 47.1%, followed by gait disorders, weakness, dystonia, jerks, parkinsonism and facial motor disorder. On multivariate regression analysis, elderly onset FMDs was more likely associated with comorbidities, in particular parkinsonism (OR 6.48, 95% CI 1.32–31.78, p= .021), cerebrovascular diseases (OR 4.64, 95% CI 1.15–18.68, p= .031), and hypertension (OR 5.15, 95% CI 2.12-12.49, p < .001). Elderly onset FMDs were also less likely to have fatigue as associated non-motor symptoms (OR 0.34, 95% CI 0.13-0.91, p = .031).

Conclusions: In line with literature data, the most frequent clinical phenotypes of elderly onset FMDs was tremor [1-2]. People with elderly onset FMDs may present with cerebrovascular and cardiovascular comorbidities and overlapping neurological conditions, i.e. parkinsonism [3]. This complexity unveils the frequent difficulty of FMDs diagnosis in elderly ages.

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