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Clinical overlap between functional neurological disorders and autism spectrum disorders: a preliminary study

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Introduction: Functional Neurological Disorders (FNDs) and Autism Spectrum Disorders (ASDs) share some common features, in terms of deficits in emotion regulation and recognition, sensory sensitivity and interoception [1-5]; however, few studies have assessed their overlap.

Objectives: To assess the prevalence of autistic traits in a sample of adult patients with FNDs, and the prevalence of Functional Neurological Symptoms (FNS) in a sample of adult individuals with High Functioning ASDs (HF-ASDs). Furthermore, the association between sensory sensibility and FNS was investigated in the HF-ASDs group.

Methods: 21 patients with FNDs, 30 individuals with HF-ASDs and 45 neurotypical controls (NC) completed the Autism Quotient (AQ); the Ritvo Autism Asperger Diagnostic Scale-Revised (RAADS-R); an ad-hoc questionnaire assessing FNS. HF-ASDs participants also completed the Sensory Perception Quotient - Short Form (SPQ-SF), assessing sensory sensibility.

Results: In the FNDs group, no patient scored above the clinical cut-off at the AQ and 19% scored above the cut-off at the RAADS, a prevalence comparable to the one found in the NC group (15.6%; both $p > 0.05$). Conversely, 86.7% of participants with ASDs reported at least one FNS, a prevalence significantly higher than the one in the NC group (35.6%, $p < 0.001$). In the HF-ASDs group, the Total Score at SPQ-SF and the total number of FNS negatively correlated, suggesting that the higher the sensibility was, the higher the number of FNS was. In particular, tactile hypersensitivity was found to be a risk factor for the development of functional weakness ($OR = 0.74$, $p = 0.033$) and paraesthesia ($OR = 0.753$, $p = 0.019$).

Conclusions: FNDs individuals did not present autistic traits more than NC. On the other hand, HF-ASDs individuals presented a higher number of FNS than NC, and this rate was associated with a higher sensory sensibility, especially in the touch domain.

References

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