

Study of the prevalence of autistic traits and alexithymia with associated psychiatric comorbidity in an outpatient FND program

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Introduction

Functional Neurological Disorder (FND) entails abnormal function in a system that is capable of normal function.

Whilst previous studies have reported higher rates of neurodevelopmental disorders in FND, little research has explored the prevalence of autistic traits or Autism Spectrum Condition (ASC) in FND.

There are several reasons why someone with a higher number of autistic traits may be at increased risk of developing FND, including differences in sensitivity to novel sensory data, cognitive or affective biases and increased susceptibility to panic. Autistic traits have also been linked to mental health difficulties, such as depression and anxiety, which are also associated with increased risk of developing FND. Many autistic individuals exhibit an overselective attention, typically focusing on a single element in a complex array, which, when focused internally, may facilitate the development of functional symptoms.

Alexithymia is a dimensional personality trait common in FND and present in ~50 of autistic people; it is characterized by difficulties in identifying and describing one's own emotional state [1]. As well as difficulty identifying feelings, it also entails, externally oriented thinking and a limited imaginal capacity. It is a subclinical construct associated with various psychiatric and neuropsychiatric conditions as well as heightened physiological arousal.

Aims

- Report the prevalence of autistic traits in an outpatient group of adults diagnosed with FND using the Autism Spectrum Quotient (AQ10)
- Report the prevalence of alexithymia using the Toronto Alexithymia Scale (TAS-20)
- Report differences in symptom severity of psychiatric comorbidity between those scoring below 6 versus 6 and above on the AQ-10, and by alexithymia status

Method

Data was collected from 105 patients who participated in the 5-week outpatient MDT programme for FND in the department of Neuropsychiatry. Complete data sets were obtained from 91 (87%) patients for self-report measures of autistic traits, alexithymia, generalised anxiety, depression, somatic symptom severity, social phobia, panic phobia, work and social adjustment scale, dyslexia, and ADHD.

Patients were grouped between those scoring <6 or ≥6 on the AQ10 (termed AQ negative or positive) and compared for significant differences on the other measures. For each of measure, a Mann-Whitney U test was performed to explore differences between the patient groups scoring <6 or ≥6 on the AQ10.

Patients were then grouped by alexithymia status (no alexithymia, possible alexithymia, and alexithymia) and a Kruskal-Wallis H was performed to explore differences in self-report measured between alexithymia status groups, using standard clinical cut-offs. Simple effects were explored by performing pairwise comparisons.

Measure	Description
AQ 10	NICE recommended to help identify whether an individual should be referred for a comprehensive autism assessment.
TAS 22	Measure of the alexithymia construct, comprising three scales: difficulty identifying feelings, difficulty describing feelings, externally oriented thinking
PHQ-9	Measure of depression
GAD-7	Measure of generalized anxiety
PHQ-15	Somatic symptom scale
SPIN	Social Phobia Inventory (SPIN)

Table 1. Self report measures

Results

40% of participants were AQ positive, meeting the recommended threshold for consideration for ASC assessment. The AQ positive group compared to the AQ negative group had higher proportions of males (38.9% vs 14.5%), alexithymia (55.6% vs 30.9%), severe anxiety (41.7% vs 23.6%) and severe depression (25% vs 14.5%). On statistical analysis, the AQ positive group also scored significantly higher on measures of alexithymia, depression, GAD, social phobia, total phobia, ADHD, and dyslexia. (Table 2)

40% scored in the alexithymic range; the alexithymic group, compared to no alexithymia, scored significantly higher on self-report measures of autistic traits, depression, somatic symptom severity, generalised anxiety, social phobia, total phobia and dyslexia (Table 3)

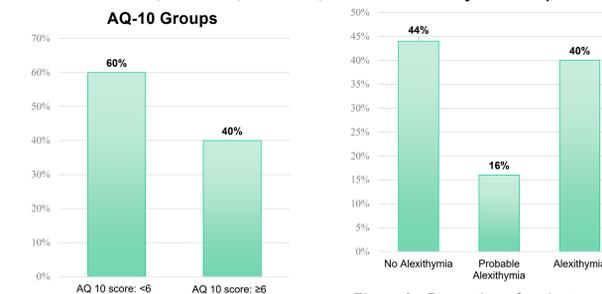


Figure 1. Proportion of patients scoring positive or negative on the AQ-10

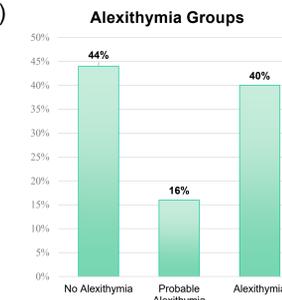


Figure 2. Proportion of patients scoring as no alexithymia, possible alexithymia or alexithymia

	AQ 10 ≥ 6 (n=36) Mean Rank	AQ 10 < 6 (n=55) Mean Rank	Mann Whitney Test p value
Alexithymia	58.69	37.69	<0.001
Generalised anxiety	53.88	40.85	<0.05
Depression	51.33	42.51	<0.01
Social phobia	53.81	40.85	<0.05
Somatic symptom severity	51.33	42.41	0.118

Table 2. Group Comparison between AQ10 Positive and AQ10 Negative in Psychiatric Comorbidities1

	No alexithymia (n=33) Mean rank	Alexithymia (n=36) Mean rank	Posthoc pairwise comparison p value
AQ 10	35.03	53.81	<0.01
Generalised anxiety	34.61	56.69	<0.01
Depression	37.79	56.74	<0.01
Social phobia	33.03	59.46	<0.001
Somatic symptom severity	41.02	55.13	<0.05

Table 3. Group Comparison between Alexithymia Status Groups in Psychiatric

Conclusion

We have demonstrated a high prevalence of autistic traits and alexithymia in a group of adults with FND.

Clinically, this suggests a need for the MDT to be "autism aware", and the AQ10 may be a useful tool in the management of FND. If a high proportion of autistic traits translates into a high prevalence of ASC, then the MDT would need to make certain considerations for autistic patients, such as in the use of language, consideration of cognitive flexibility, timeliness of session scheduling, variability in routine and tolerance of uncertainty. In the context of CBT, challenges might include ability to engage in alternative ways of thinking about and responding to perceived distressing stimuli, or the consideration of alternative possibilities.

This study offers limited mechanistic insights, but it builds on previous research exploring ASC, alexithymia and FND, where an important role for interoceptive awareness has been highlighted[2]. Future research should explore what mediates this relationship through gathering interoceptive data.

- ## References
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