Surveillance study of a UK cohort of adolescents presenting with functional tic-like behaviours (FTLB):

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Background

Currently, few studies have investigated the prognosis for children with FTLB:

- One study found 20% of children had remission without active treatment, but 55% relapsed (Martino *et al.*, 2023).
- Another reviewed 11 adolescents with FTLB and showed variable outcomes in anxiety and tics at 1 year follow up (Prato *et al.*, 2023).
- One reported marked improvements in symptoms in the majority of 15 adolescents studied (Howlett *et al.*, 2022). Similarly, a study looking at 28 adolescents found that all had improvements or resolution of FLTB symptoms (Okkels *et al.*, 2023)

Methods

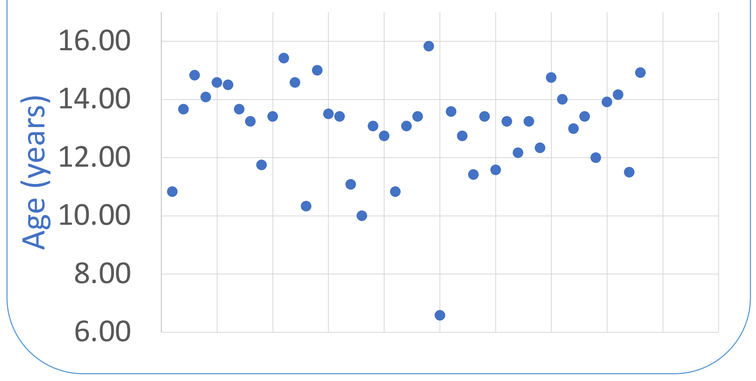
We completed a clinical interview with parents/carers of patients diagnosed with FTLB between 1-4 years after symptom onset **(n=43)**. We also administered a structured questionnaire with a collation of qualitative and quantitative data. Inclusion criteria included teenagers with FTLB in the Evelina TANDEM service (all aged under 18 years at diagnosis). Retrospective Children's Global Assessment Scale (CGAS) scores were done by the clinicians at diagnosis and repeated at follow-up. CGAS is a measure of general function, wellbeing and impairment.

Summary Decile Descriptions for CGAS:	
100-91	DOING VERY WELL
90-81	DOING WELL
80-71	DOING ALL RIGHT– minor impairment
70-61	SOME PROBLEMS– in one area only
60-51	SOME NOTICEABLE PROBLEMS– in more than one area
50-41	OBVIOUS PROBLEMS– moderate impairment in most areas or severe in one area
40-31	SERIOUS PROBLEMS– major impairment in several areas and unable to function in one area
30-21	SEVERE PROBLEMS– unable to function in almost all situations
20-11	VERY SEVERELY IMPAIRED– so impaired that considerable supervision is required for safety
10-1	EXTREMELY IMPAIRED– so impaired that constant supervision is required for safety

Demographics:

100% (n=43) biologically female

95% cis gender female



88.4% have at least one diagnosed co-occuring condition

69.8% had an anxiety disorder

Mean age at symptom onset: 12.4 years old (SD 2.2 years)

Time of follow-up:

1-2 years after symptoms onset	12%
2-3 years after symptoms onset	56%
3 years or more after symptoms onset	33%

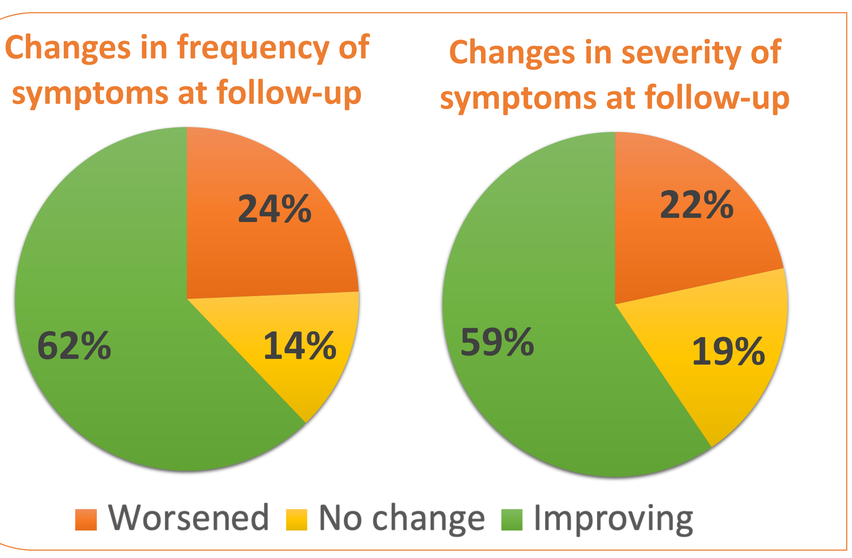
Average time from symptom onset to diagnosis is 1.2 years (SD=0.8)

Findings:

14% (n=6) completely recovered

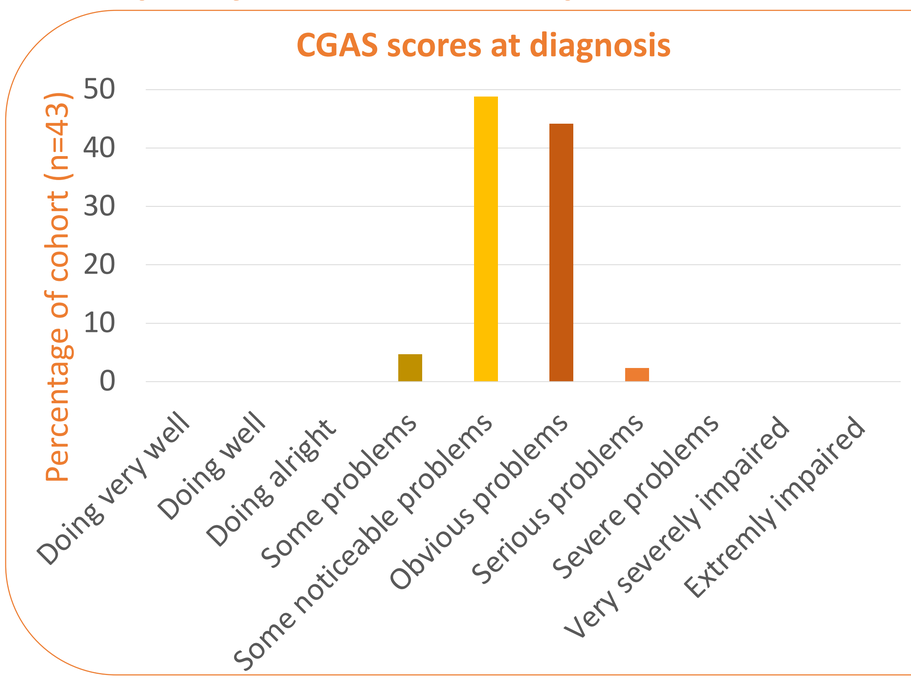
4/6 engaged in psychological/behavioural therapy or psychoeducation
All attending full-time school
3/6 diagnosed with an anxiety disorder
None on pharmacological treatment for FTLB/FND/psychiatric comorbidities
Average CGAS score at diagnosis: 54.5 (SD 4.7)
Average CGAS score at follow-up: 73.8 (SD 12.3)

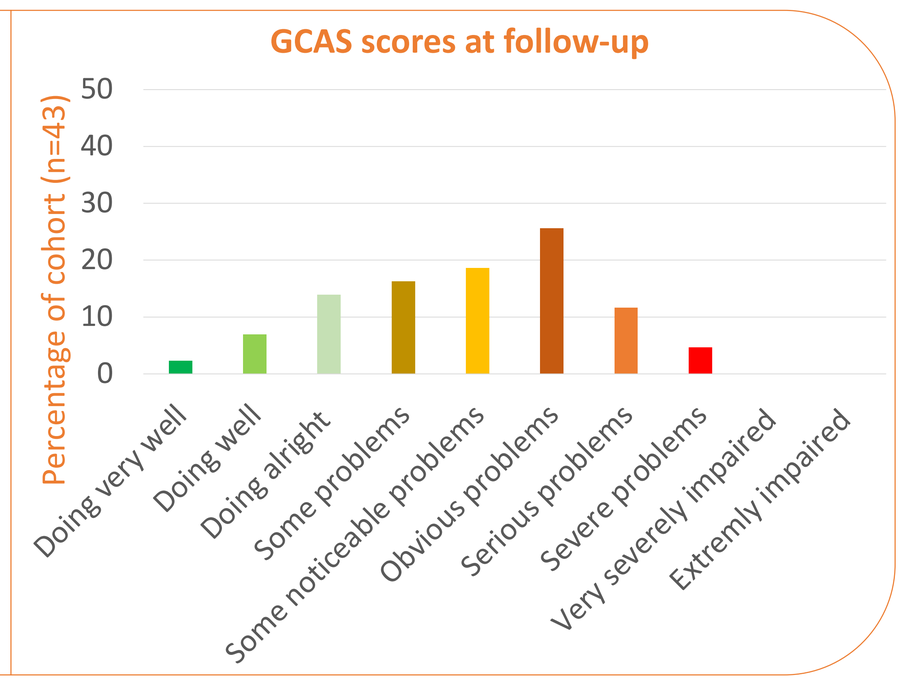
As for the rest?



62% (n= 26) report a peak of symptoms before diagnosis

As for quality of life at follow up?





Statistically significant increase in mean CGAS score of 6 at follow-up, (p=0.018, t=2.464)

23% (n=10) had a parent stop working completely to care for their child's health

48.8% (n=21) missing school at follow-up

30.2% (n=13) with less than 50% of school attendance

Discussion:

- Symptoms overall improve in our cohort however, full resolution within 4 years was only seen in 14 % of our patients.
- Although functional symptoms improved in many, quality of life remained impaired for 76.7% (CGAS <71) and 31 % were not attending full-time school.
- Further analysis is planned to describe the impact of management approaches and of time-to-diagnosis on prognosis.
- We plan to study the emergence of new or different functional symptoms prospectively.

Limitations:

- Our service is not an FND service, therefore support for patients post-diagnosis is limited to psychoeducation and referral on to relevant services. This may have had an impact on the findings.
- The nature of data collection (interview of parents) may have led to bias (response, observer, interviewer). Similarly, retrospective CGAS scores may be subject to recall bias.

References:

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