# Clarifying the Differences between Patients with Organic Tics and Functional Tic-like Behaviors

## **TAKE HOME MESSAGES**

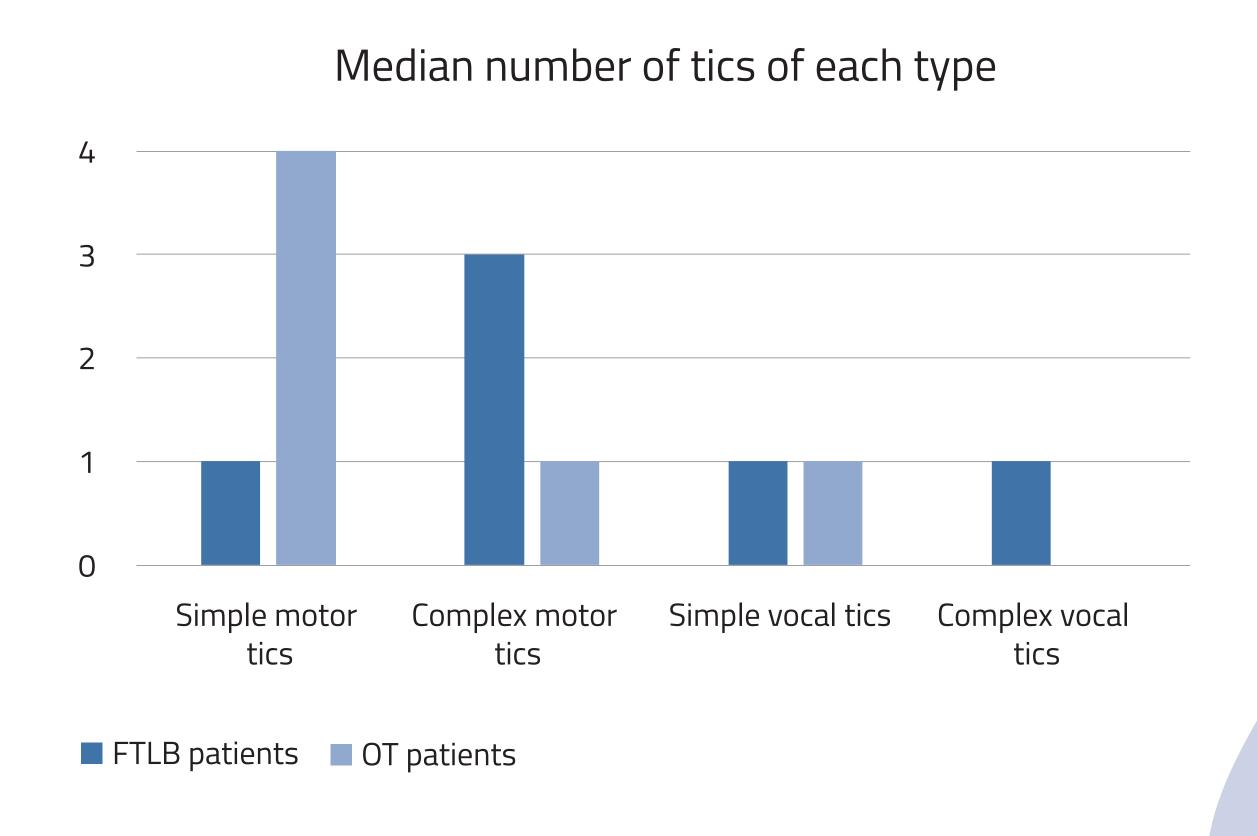
To the best of our knowledge, this is the biggest study comparing patients with Functional Tic-Like Behaviors (FTLB) and Organic Tics (OTs) while correcting for age and sex. It located several differences between the patient groups and notably the results showed that FTLB patients had fewer simple motor tics than OT patients while there were no differences in the comorbidity profiles between the patient groups. During the diagnostic process it may thus be beneficial to emphasize lack of simple motor tics more and presence of comorbidities less.

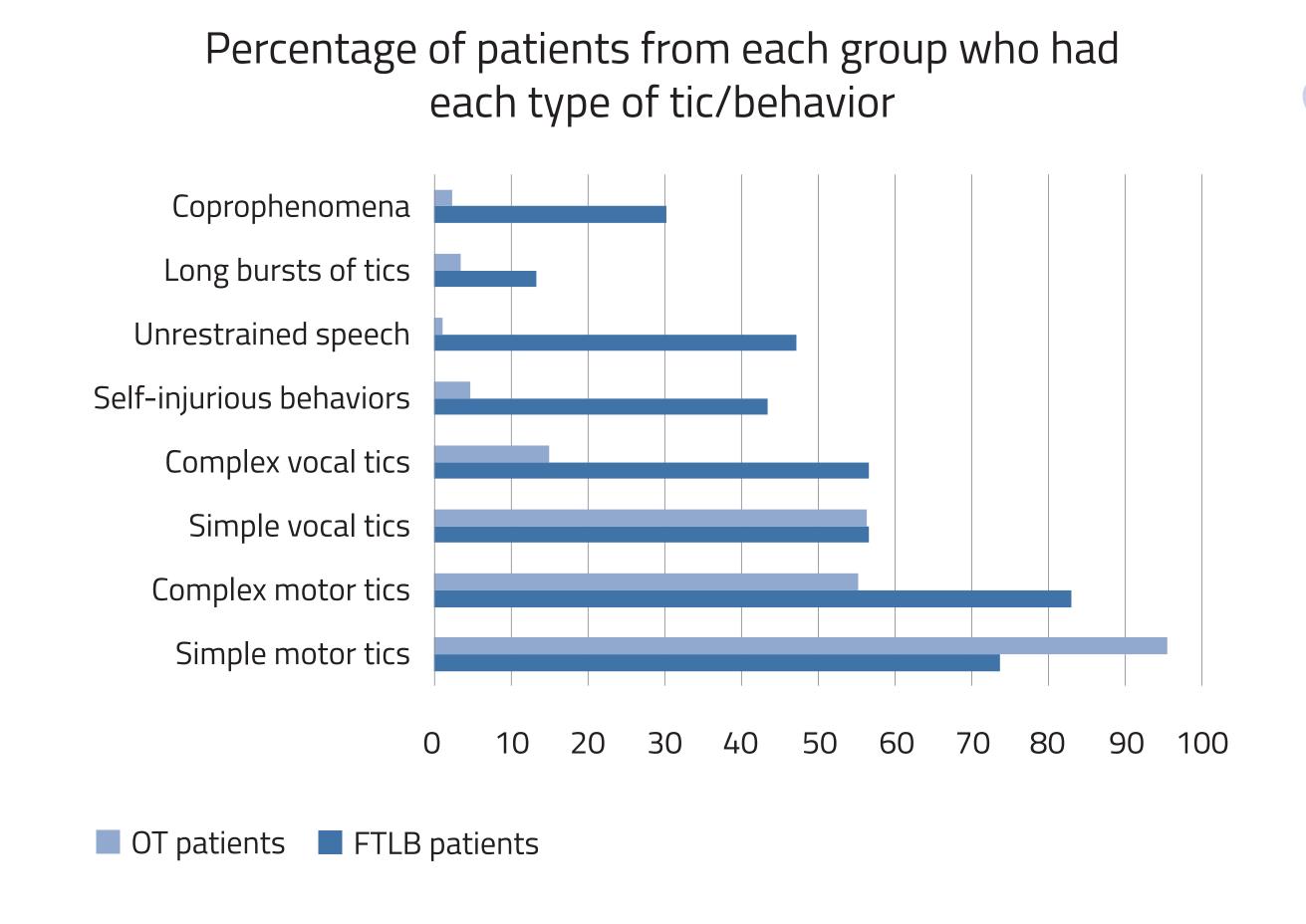
#### **BACKGROUND**

During the COVID-19 pandemic, a steep increase in paediatric patients with Functional Tic-Like Behaviors (FTLB) was seen worldwide. FTLB is a non-organic disorder that mimics organic tics (OTs). The sudden increase in patient numbers has increased the importance of being able to discriminate between FTLB and OTs. The purpose of this study was to both replicate previous findings and test suggested differences between paediatric OT and FTLB patients.

#### **MATERIALS AND METHODS**

The medical records of all FTLB patients (n=53) first seen in the National Tourette Syndrome Clinic after May 2020 were examined. The relevant data was extracted and compared to data from OT patients first seen in the same period (n=200). Age and sex was corrected for in the analysis as appropriate.





### **RESULTS**

The following shows the results of the study. Underlined: Results replicated from other studies. Bold: New findings from this study. Cursive: Results from other studies which could not be replicated

# FTLB Patients Compared to OT Patients

Older at onset

More likely to be female

Decreased likelihood of tics in the family

More complex motor tics after correcting for age and sex Increased likelihood of a psychiatric diagnosis in the family

Less likely to have simple motor tics, and fewer simple motor tics in total after correcting for age and sex

More likely to have self-injurious behaviors, coprophenomena and unrestrained speech after correcting for age and sex Increased likelihood of psychosocial trigger before onset after correcting for age and sex

Increased likelihood of anxiety and other psychiatric diagnoses as comorbidities



