Background

There are few studies on tic disorders in adults.
- The sex distribution might be more even between the two sexes in adulthood vs ratio 4 males : 1 female in childhood.
- Tic-related impairment different by sex in adulthood? (F>M?)
- Other signs of sexual dimorphism in tic disorders?

Screening of comorbidities, tic-related quality of life and Yale Global Tic Severity Scale (YGTSS) over 12 months

Results

Table 1. Differences between patients with primary tics and patients with FTLBs (one patient with secondary tics, not displayed). *History of mild tics in childhood.

<table>
<thead>
<tr>
<th>PRIMARY TICS</th>
<th>n=98 (79.8%)</th>
<th>FUNCTIONAL TIC-LIKE BEHAVIOURS</th>
<th>n=25 (20.2%)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at inclusion</td>
<td>33.4 years (range 18-73)</td>
<td>19.9 years (range 18-24)</td>
<td>&lt;0.0001</td>
<td></td>
</tr>
<tr>
<td>Age at tic onset</td>
<td>8.9 years (range 3-27)</td>
<td>15.7 years (range 5-21)</td>
<td>&lt;0.0001</td>
<td></td>
</tr>
</tbody>
</table>

Primary tic disorders in females and males

Most common treatments: aripiprazole (35%), cognitive behavioural therapy for tics (27%) and botulinum toxin (24%); 24% were not treated for their tics. French patients were more often treated with aripiprazole (70%) than Canadian patients (11%).

No differences in treatment of the tics between the two sexes.

Functional tic-like behaviours (FTLBs)

The number, intensity, complexity, interference of tics, and the YGTSS total tic score were significantly higher in patients with FTLBs than in patients with primary tic disorders, as was the tic-related impairment (31.3/50 in patients with FTLBs versus 19.0/50 in patients with primary tics; p<1.0).*

Family history: autoimmune and neuropsychiatric disorders

- 23/56 (41.1%) of patients with primary tic disorders had at least one family member with an autoimmune disease. No differences by sex.
- 35/56 (62.5%) patients with primary tic disorders and 11/13 (84.6%) patients with FTLBs had at least one family member with a neuropsychiatric disorder (mostly depression and anxiety, respectively). Female sex was associated with a neuropsychiatric family history (OR 5.6, p=0.003).

Conclusions (ongoing study)

- Few differences between the two sexes in adults with primary tics (n=98):
  - Females had more eye blinking, more simple eye movements and more simple arm movements than males.
  - No difference in age of onset, YGTSS total tic score and impairment by sex.
  - Females had more comorbid anxiety than males.
  - A recent study found no difference in tic severity in adults by sex whereas a previous study reported higher motor tic scores and tic-related impairment in women. In children and youth, global tic severity seems higher in females. 4

- 20% of our adult cohort have FTLBs:
  - YGTSS total tic and impairment scores >> Tourette, consistent with literature. 3
  - In adults with primary tic, high rates of autoimmune family history (41%) and of neuropsychiatric family history (63%).

References


