

Case Report

Late-Life Tourette Syndrome Is a Cause of Unexpected Cursing in the Elderly

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Keywords

Case report · Central nervous system · Cognitive dysfunction · Tourette syndrome · Aging · Age of onset · Mental function · Statistics

Abstract

Tourette syndrome is a tic disorder with onset in childhood. By contrast, we report a new Tourette syndrome with onset in late life. We use statistics to support our contention that this behavioral disorder is a hitherto unrecognized variety of Tourette syndrome.

There are three tic disorders distinguished by the types of tics present (motor, vocal/ phonic, or both) and by the length of time that the tics have been present. Individuals with chronic tic disorder have either motor tics or vocal tics which have been present for more than 1 year.

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Published by S. Karger AG, Basel

The chronic Tourette disorder (CTD) we report here appeared suddenly in two elderly subjects age 84 and 91 years, and it has persisted for more than 1 year. However, this small sample consisting of one woman (aged 84 years) and one man (aged 91 years) is distinguished by the presence of vocal tics (cursing) only. We believe this to be a new syndrome which is not, as yet, widely recognized in the otherwise healthy elderly population.

The classical CTD in young patients is associated with the risk of cardiometabolic disorders [1, 2]. Whereas patients with the new syndrome to which we wish to draw attention are remarkably free from cardiometabolic diseases.

To support our contention, we used statistical methods but caution that our numbers are too small to draw firm conclusions.

In Sweden [1], in a cohort of 2.1 million children, 3,590 were found with Tourette syndrome (TS). Whereas in a CDC (USA) survey study [3] of 91,642 children with TS, 43% were found to have TS with behavioral or conduct problems and no tics. We infer that approximately 1,544 of the Swedish children might have behavioral or conduct problems. On the other hand, in our small sample of 2 older adults (aged >80 years) with late onset TS, 100% had behavioral or conduct problems and no tics. Note that there are approximately 13 million US adults aged ≥80 years.

A comparison of these percentages (43 vs. 100%) found no statistical difference (Fisher's exact test $p = 0.19$), mostly due to the small sample size.

The ages of the Swedish TS children (median 14 years, interquartile range 11–18) and the ages of our older TS adults (age >80 years) are significantly different (t test $p < 0.001$).

Apparent prevalence rates for TS in Sweden were 3,590/2.1 million = 1,710 per million for the Swedish children and 2/13 million = 154 per billion for the US older population (Fisher's t test $p < 0.001$). These estimates differ for the older TS in the USA because of small numbers in the older individuals. This comparison should be re-visited once more complete data become available.

We draw attention to this condition in the hope that more case reports might strengthen our statistical impressions that children with TS and adults with TS differ primarily in age of onset and prevalence rates but not in clinical manifestations.

Statement of Ethics

Subjects have given their informed consent, and the study protocol has been approved by the NMHEMC Research Foundation's committee on human research (#2019–2-4).

Disclosure Statement

The authors have no conflicts of interest to declare.

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