

MOVEMENT DISORDERS

OUTCOME OF TIC AND OBSESSIVE-COMPULSIVE SYMPTOMS IN CHILDREN WITH TOURETTE SYNDROME

The clinical course of tic and obsessive-compulsive (OCD) symptoms in children with Tourette syndrome (TS) through adolescence and adult life was evaluated at the Yale Child Study Center, New Haven, Conn. Forty-six children with TS were interviewed at a mean age of 11.4 years (range 7.5-13.9 years) and again at a mean age of 19 years (range 16-22.8 years). At the first interview, all 46 had tics of at least moderate severity. At the second interview, symptoms were minimal or absent in the majority, 15 (33%) reported complete freedom from tics, and only 10 (22%) had moderate or marked tic severity. Tic severity was maximal at a mean age of 10.6 (range 6-19 years). OCD symptoms reported in 19 were most marked at follow-up (score of 10.8+/-9.2) and were milder at baseline (4.1+/-4.2). Comorbid conditions during the lifetime and reported at follow-up interview included ADHD in 10 (22%) patients, depression in 15 (33%), bipolar disorder in 2 (4.3%), and schizophrenia in 1. Medications for treatment of tics (guanfacine or clonidine) were used in 23 (50%) at baseline interview compared to 6 (13%) at follow-up. Antipsychotics were used in 10 (22%) initially compared to 5 (11%) at follow-up. SSRIs were used in 4 patients at both initial and follow-up interviews. Severe tics in childhood persisted in to adulthood; for every 10-point increase in tic severity in childhood, subjects were 2.8-fold more likely to have moderate or severe tics in early adulthood. ADHD in childhood was not a risk factor for increased tic severity in adulthood. OCD severity initially was not associated with severe OCD later. Higher IQ scores initially were significantly associated with severe OCD in adulthood; for every 10-point increase in childhood IQ, subjects were 2.8-fold more likely to have OCD symptoms at follow-up. (Bloch MH, Peterson BS, Scahill L, et al. Adulthood outcome of tic and obsessive-compulsive symptom severity in children with Tourette syndrome. **Arch Pediatr Adolesc Med** Jan 2006;160:65-69). (Respond: James F Leckman MD, Child Study Center, Yale University School of Medicine, PO Box 207900, New Haven, CT 06520).

COMMENT. In children with Tourette syndrome followed through adolescence to early adulthood, tic severity decreases, whereas OCD symptoms tend to increase in severity with age, especially in patients with higher IQ. In discussing outcome of tic disorder, the "rule of thirds" is advocated: one third remit, one third improve, and one third persist (Singer HS. **Arch Pediatr Adolesc** Jan 2006;160:103-105). Prediction of outcome in an individual patient is more difficult, in the absence of precise clinical indicators. However, caudate volumes in childhood, measured on MRI, may predict severity of TS in early adulthood (**Ped Neur Briefs** Nov 2005;19:88), and severity of tics and IQ are additional prognostic indicators.

Fracture of peroneal bones secondary to complex tic is reported in a 13-year-old child referred with pain in the legs, relieved by rest and worsened by walking (Fusco C et al. **Brain Dev** Jan 2006;28:52-54). The child had Tourette syndrome and OCD, with repetitive need to sit down on his heels abruptly, leading to stress fractures. Healing and recovery followed treatment and a change to a simple motor tic involving the mouth.