Frequency of Elevated ASO Titer in Children and Adolescents At Onset or Exacerbation of Tic, OCD or Aggression and Symptomatic Effect of Antibiotic Treatment

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Background: Whether streptococcal infection with immune response causes or exacerbates tic, obsessive-compulsiveness (OCD), or aggressive (Agg) in pediatric patients is debated (Swedo, 1998; Singer, 2005). This study examines the frequency with which in referred behavioral pediatric patients, with a history of the above symptoms at onset or increment within six months or less, an elevated anti-streptolysin O (ASO) titer was obtained and, if antibiotics (ab) treatment, no adjustment in concomitant Rx, the course of presenting symptom(s).

Method: Retrospective chart analysis of pediatric behavioral patients in whom ASO titers were drawn, the frequency of elevated titers, the course of presenting symptom(s) if ab therapy was employed.

Results:
N-45(34M), mean age 13+/-4.5 years; Dx Tourette-10; OCD-24; AD(H)D-11
Elevated ASO titer 16(36%)(13M); 10 ab Rx(2-all 3 sx, 3-with 2 sx)
Symptom Improved/Total
  Tic 6/7(86%)
  OCD 5/7(71%)
  Agg 3/3(100%)
No ab Rx: unchanged-3, unknown-3

Conclusion:
ASO titers are not infrequently elevated in behavioral pediatric patients (one-third). Ab Rx may be associated with acute Sx reducton, whether tic, OCD or Agg; the mechanism remains obscure.

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