Preadolescent child with sudden onset or exacerbation of OCD symptoms or tics Screen for comorbid symptoms: separation anxiety, emotional lability, ADHD symptoms \* Take medical history, focusing on a history of symptoms suggestive of streptococcal infection and neurological problems \* Perform mental status examination \* Perform focused physical examination looking for signs of streptococcal infection and abnormal movements (e.g., tics, choreiform movements) Take family history, screening for OCD or tic disorders as well as rheumatic fever or Sydenham's chorea Is there evidence of a streptococcal infection temporarily associated with symptom onset or exacerbation? OR is there a strong family history of rheumatic fever? Yes No Initiate, augment or switch standard Take throat swab and send for treatments (e.g., CBT or SRIs for OCD) culture. Perform ASO titre according to established guidelines Is the throat swab positive? Yes No Initiate, augment or switch standard Treat infection with antibiotics treatments (e.g., CBT or SRIs for OCD) according to established guidelines \* Monitor symptoms over time \* Treat recurrent infections promptly with antibiotics \* Repeat ASO titers (suggest every 3-4 weeks for an additional 1-2 titers) and observe trends Is there evidence of repeated exacerbations of symptoms associated with either increased titres or clinical evidence of strepococcal infections? Nο Yes \* Consider switching or augmenting initial psychotropic medications \* Consider antibiotic prophylaxis in consultation with a pediatrician \* Consult with a child psychiatrist or neurologist or refer to the NIMH PANDAS study

## Fig. 1: Assessment and treatment of children presenting with abrupt-onset obsessive-compulsive disorder (OCD) or tic disorders.

ADHD = attention-deficit hyperactivity disorder, ASO = antistreptolysin, CBT = cognitive behavioral therapy, SRIs = serotonin reuptake inhibitors, NIMH = US National Institute of Mental Health, PANDAS = pediatric autoimmune neuropsychiatric disorders associated with streptococcal infections.