

Tic Disorder with Functional Overlay

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Introduction

Tics are sudden, brief, intermittent, repetitive and non rhythmic movements (motor tics) and utterances (phonic tics) that are involuntary or semi voluntary in nature (1). It is a hyperkinetic movement associated with sensory phenomenon (2). It commonly affects the muscles of face and neck and it occur in response to a stimulus or in response to an internal urge. Tic disorder begins at 4 to 5 years of age but often don't present until later at around 9 to 10 years. Tics usually began as simple motor tics and in some progress to complex motor tics and phonic tics over a period of 1 to 2 years (3). Tic disorders are common among males than females (4). Prevalence of tic disorder in children vary from 1% to 29% depending on the characteristics of the study populations, the diagnostic criteria and methods of case ascertainment(5).Epidemiological studies involving direct observation indicate the highest prevalence of tics at 3 to 5 years of age and worst ever symptoms at 9 to 12 years of age(6). Meta analysis of 13 studies of children yielded a prevalence of tourette at 0.577% and prevalence is higher in boys(1.06%) than girls(0.25%)(7).Tic disorders often have co-occurring psychiatric disorders, most commonly Obsessive-Compulsive Disorder(OCD) or Attention Deficient Hyperactivity Disorder(ADHD)(8).

Case

A 12 year old female child presented to the psychiatric OP with 1 year history of speech difficulties and unusual production of loud voice. She was also having frequent

blinking of eyes, head jerking, involuntary shrugging of shoulders and involuntary twitching movements of facial muscles. The motor tics started at the age of 9 years and vocal tics have a history of one year. The first appeared symptom was frequent eye blinking and then it progressed to involuntary motor movements like head jerking, shrugging of shoulders and grimacing. The symptoms were mild and were left untreated. The vocalization occurred 3 to 4 times per day initially and by time the frequency increased such that the sound occurred every few minutes. The vocalization was high pitched, troublesome and it severely affected her day today social life and was not going to school. Patient was seen by consultants, both psychiatrists and neurologist, she was treated with antipsychotics. In spite of the treatment the sound production persisted. As per the details obtained from her care taker no relevant family history of mental illness was found.

On physical examination she was conscious, oriented responding appropriately to oral commands and answering to questions. She was making sharp loud voice preceded by throat clearing and facial twitching. Her vitals were normal and no other physical symptoms were observed. Mental status examination was done. Though she was adamant and anxious rapport was easily established. She was the second among 4 siblings. There was no history of psychiatric illness in her family and her developmental milestones were normal. Her premorbid personality showed some borderline traits. The content of her thoughts showed some ideas of helplessness. She had a slight awareness of being sick,

but denying at the same time. She was admitted and all investigations including laboratory tests, MRI scan and EEG were done. There were no abnormalities observed. No features suggestive of obsessive compulsive disorder (OCD) were seen and the evidences of attention deficit hyperactivity disorder (ADHD) were also found negligible.

Child apperception test (CAT) was performed on the second day which usually illustrates the various personality traits in children. CAT has the maximal benefit in children of 3-12 years age. She performed CAT without much narration and abstract thinking. She only mentioned concrete superficial and one-dimensional things. On evaluation it was assessed that she isn't bothered about constraints and believes in an easy start and end. She couldn't adapt to the situations and was intolerant. Evidences of sibling rivalry were seen during CAT. During counselling sessions and consultation her symptoms exaggerated showing her attention seeking behaviour. She was over attached to her grandfather and her conditions worsened in his absence.

She was admitted in the Psychiatry ward for about 30 days and managed with antipsychotics haloperidol and tetrabenazine. The risks of extra pyramidal side effects were prevented with trihexiphenidyl hydrochloride 2mg twice a day. 5mg haloperidol was given twice a day and tetrabenazine in the dose 25 mg once a day. ASO titer result came positive and she was started with tablet Pentids 400mg on the 16th day of therapy.

Along with pharmacological therapy JPMR training was also given to the patient. During the initial days she was unable to complete the relaxation therapy without producing phonic tics but gradually the frequency of tics decreased and finally she was able to perform the relaxation therapy without tics. Psycho education was given to her care givers. Environmental manipulation was done in order to tangle the separation anxiety when grandfather is away from her. As a part of psycho education, the grandfather was advised to stop over satisfying her needs and also not to reinforce her insistence.

Discussion

Tic disorders begin at 4 to 5 year but often don't present until later at around 9 to 10 years. They are known to affect 10 % of children Tics begin as simple motor tics then it progress to motor tics and phonic tics appear later.(3).In this case the tics started at the age of 9 years. Motor tics appeared first and vocal tics have a history of 1 year. By 18 years tics often wane but in small percentage it may be problematic (9).ADHD often present prior to tic onset. They may improve during adolescence but at slower rate than tic behavior. The presence of co morbidity predicts poorer psychosocial outcome (10).Co morbid disorders were absent in this patient. Female relatives of patients with tics, have elevated rates of obsessive compulsive behavior and it appear likely that obsessive compulsive behavior is an alternate expression of tic disorder(11).The different approaches for management of chronic tics include : Pharmacological therapy,habit reversal training and exposure with response prevention.Add on therapies are contingency management, function based intervention, relaxation therapy etc.The pharmacological treatment include dopamine D2 receptor antagonist therapy and dopamine agonist therapy. The neuroleptic drugs are the current standard in terms of efficacy in the treatment of tics .They can be effective at doses far below the usual treatment dose for psychosis. RCTs of haloperidol, fluphenazine , pimoxime reported to improve tics(12). Risperidone , olanzapine and ziprasidone have been shown to produce better efficacy with fewer side effects(13).In the disorder with co morbid ADHD, atomoxetine stimulants or clonidine should be considered or if tics are severe, combination of stimulants and risperidone. Mild to moderate tics associated with OCD , depression or anxiety sulphiride monotherapy can be helpful. More severe cases, combination of risperidone and SSRI should be given (14).here we used antipsychotic haloperidol and tetrabenazine.

Conclusion

This is a case of tic disorder with functional overlay. Along with tics the evidences of conversion disorder were also considered. This is one of the examples where the benefits of combining psychotherapy along with conventional pharmacologic treatments were proved.

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