CASE REPORT

FUNCTIONAL NEUROLOGICAL SYMPTOM DISOREDER IN AN ADOPTED CHILD WITH TOURETTE SYNDROME

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Abstract

Conversion disorder is featured by the presence of deficits affecting the motor and sensory functions without any organic basis. It excludes the symptoms fully explainable by a general medical condition, substance abuse or culturally sanctioned behaviour. It mimics a neurological disorder. Dissociative/conversion disorders affect nearly 31% of children and adolescents. These children experience pivotal impairments in their academics, and daily functioning. Incidence of psychiatric comorbidities such as anxiety and depression is high in these population. Pseudoseizures followed by motor symptoms were the common presentations of conversion disorder in adolescents in India. Few of the other symptoms are weakness, aphonia, gait disturbances, abnormal movements, loss of vision and severe pain. Hysteria was observed to be the commonest neurotic disorder in children. Conversion disorder is by far the commonest form of somatoform disorder found in children. Latest research proves neural correlates for persons with genetic susceptibility for conversion symptoms. Study by Kozlowska states that larger grey matter volume in the supplementary motor area, superior temporal gyrus, and dorsomedial prefrontal cortex reflects the genetic variability that predisposes the children to react to psychological stress with functional neurological symptoms.

Keywords: Pseudoseizures; Dorsomedial prefrontal cortex; Aphonia; Hysteria

Introduction

Children who are adopted are subjected to prenatal substance exposure or pre-placement deprivation. Those who were placed relatively late in their adoptive homes are at heightened risk of social, intellectual, and emotional problems. Externalising symptoms like ADHD and ODD were found to be two times higher in children who are adopted. Parental defiance, running away, and gender acting out, aggressive and antisocial behaviour are also common in adopted children.

A tic is a sudden movement or vocalization that is rapid, recurrent, nonrhythmic, and stereotypical. Tics decrease in severity with distraction and relaxation and increase with stress and anxiety. Tics may be preceded by premonitory feelings and patients often report that the tics are intentional responses that are executed to relieve these uncomfortable sensations. Only 1 in 10 patients with Tourette syndrome has no other behavioural problems. ADHD affects as many as 60% to 80% of patients with Tourette syndrome and are seen to occur even in subclinical cases. OCD was found to occur in 11%-80% of the patients with Tourette syndrome. Affective disorders are found in 10% of the patients and Schizotypal personality was found in 15%. Episodic behavioural outburst and anger issues were found in 25%-75% of the patients. Attention Deficit/Hyperactivity Disorder (ADHD), Obsessive Compulsive Disorder (OCD), depression, anxiety disorders, conduct disorders, personality disorders and self-injurious behaviours are also common in patients with Tourette syndrome. Other comorbid illness which are notfrequent are migraine, cervical myelopathy, cervical disc herniation [1].

Case Report

ADHD appears 2 yrs-3 yrs earlier and OCD appears 5 yrs-6 yrs later to that of the onset of Tourette syndrome. Females with Tourette syndrome are at higher risks of major depressive disorder, eating disorders, anxiety disorders, disruptive behaviour disorders and psychotic disorders are common in Tourette syndrome patients with comorbid ADHD and OCD [2]. Children with Tourette syndrome develop atleast one comorbid psychiatric disorder in their later life and some are at risk of developing even two disorders. Children with Tourette syndrome with concomitant OCD, parents with ADHD, to be followed up longitudinally for the development of sub stance use disorders, anxiety and mood disorders.

Here we present the interesting case of 17 yrs old adopted child diagnosed as a case of Tourette syndrome and had functional neurological symptom disorder as a comorbidity [3]. Conversion disorder is a rare psychiatric comorbidity in Tourette syndrome and hence we present this case [4].

A 17 yrs old adopted male, B.E discontinued, belonging to upper socioeconomic status with adopted parents presents to the OPD with complaints of eye blinking, movements of lips with deviation of angle of mouth, poor scholastic performance, sudden howling sounds, head nodding, hitting like movements while sitting in a chair past 6 years [5]. 6 months back he joined BE mechanical engineering which was much against his wish and he was irregular to college for first 2 months and started to complaint about numbness and loss of sensation over right side of the body, reduced appetite and stopped going to college [6].

Results

He was on antipsychotics like risperidone 2 mg, haloperidol 1.5 mg, tetrabenazine 75 mg in divided doses, olanzapine 5 mg from his multiple consultations but would be on irregular follow up [7]. Among these drugs, haloperidol and tetrabenzine. An adopted child and he came to know about this information from his uncle when he was 11 yrs of age and his parents have not revealed it till date and they believe that he still doesn't know about his adoption [8]. No history of attention deficits, hyperactivity, defiance, repetitive thoughts or images in the past (Table 1).

Table 1. Multiple consultations made in the past 6 yrs

S.No	Drugs name (Antipsychotics)	In mg
1.	Risperidone	2
2.	Haloperidol	1.5
3.	Tetrabenazine	75
4.	Olanzapine	5

On examination of central nervous system, sensory examination revealed diminished light touch sensation, pain and vibration in right side of the body upper limb, lower limb and trunk. Examination of functional signs in sensory system revealed splitting in midline phenomenon where the patient could not feel the sensations on the right side of the midline, when both hands were twisted in the back with eyes closed; he could feel the sensations in the right side [9]. On mental status examination, he had sudden jerky movements of the face, legs and neck which he to resist by placing his hands against his neck (Geste antagoniste) made sudden howling sounds and had hitting movements on his trunk and abdomen, thought content had guilt, apprehension about future [10].Investigations done were complete blood count, thyroid function tests, serum ceruloplasmin, ASO titres, C-reactive protein, MRI brain, EEG, ECG, EMG were within normal limits [11]. Scales administered were yale global tic severity scale-score 117, yale brown obsessive compulsive scale-3, Kiddie Schedule. For affective disorders and schizophrenia-score,

premonitory urge for tic scale-score. Abnormal involuntary movement scale-score. Cardiology opinion obtained-stable cardiac status and no evidence of mitral valve thickening or grooving. Neurologist diagnosed a case of Tourette syndrome with complex motor and vocal tics, right hemi sensory loss as conversion [12].

As per ICD-10, he was diagnosed as a case of F95.2 Combined vocal and multiple motor tics (Tourette), F44.6. Dissociative anesthesia with sensory loss. He was started on tablet Haloperidol 1.5 mg BD and tablet clonazepam 0.5 mg 1 HS, tablet sertraline 50 mg and tetrabenazine 25 mg BD [13]. His parents were educated about the stressor about his studies, his lack of interest in engineering and the reason of the numbness. His numbness reduced during the successive follow ups [14].

Discussion

Dissociative disorders have onset after a major stressful life event. Family factors like lack of cohesion, inflexibility, poor communication have been associated with dissociative symptoms. Stressful events take away the control from the individuals causing incapacitation and emotional distress. Previous research states that the extent to which the family members are concerned and committed to the family, the degree to which the family members are helpful of each other and extent to which the family members are allowed to express their feelings is less in disruptive conversion disorder patients. Researchers have speculated that in majority of the cases, there seems to be a misfit between parental expectations and the adoptees innate abilities. There seems to be higher expectations from the adoptive parents side, which when unmet leads to many externalising problems. Our patient's mother was the principal of a college and expected her son to do engineering degree as everyone else in the family were engineers. She was bullied by her family members as her son couldn't pursue engineering. The boy felt comfortable with his dad rather than his mom as he couldn't express associated with the engineering course and they were advised to relook about it. Few physicians include eschewing the simplistic assumption that the psychological problems are. recommendations to the pediatricians and his disinterest towards engineering to her. There was cohersion from her side and as a result he was unable to communicate properly with her. This might be a pivotal cause in the origin of the conversion symptom.

Research also states that adoptive parents are very much anxious about their children's health status and they are affluent too. This marks the reason for the higher representation of psychiatric illness and somatisation among adopted children. Our patient was taken for multiple neurologist consultations before. The parents were explained regarding the nature of Tourette syndrome by various neurologists before but they expected the abnormal movements to settle down at any cost as they were constatntly bullied by their family members for adopting the child.

Adoptees had a tendency to exhibit more co-morbidities. Our patient had Tourette syndrome along with conversion disorder. Adoptees are also judged more often than the non-adoptees. Our patient's parents think that he doesn't know about the adoption. But he knows when he was in class 6 and he has it heard from many of his relatives. Many previous Indian studies have highlighted the "Role model" concept in the etiology of conversion disorders. Role is an automatic learned sequential pattern of actions which are developed under the influence of people involved in the child's development. But as such no such role model was observed in our patient. Also previous Indian studies done in north eastern parts have stated that isolated sensory phenomenon is rare but in our patient, the only presenting conversion symptom was a hemisensory loss.

Treatment is challenging. Mutidisciplinary approach involving psychiatrist, neurologists, social worker and psychologist is only beneficial. Involving family members and siblings help in better outcomes. Parents must understand the nature of the illness. Terms like 'faking'and 'psychogenic' to be avoided. In this patient, the parents were educated about the stressors.

Conclusion

Few recommendations to the pediatricians and physicians include eschewing the simplistic assumption that the psychological problems are attributed to the adoption. Early intervention to be practiced rather than a wait and watch policy. Attributing every symptom to the genes or early birth adversity to be avoided.

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