

Case Report

Beyond the ‘tic’ king clock: a case report on adult onset tic disorder

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Received: 20 April 2024

Accepted: 18 May 2024

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ABSTRACT

Tic is rapid recurrent non-rhythmic motor movement or vocalization; movement of limbs or other body parts is known as motor tic and involuntary repetitive sound like grunting sniffing throat clearing is known as a vocal tic. Tic is a neurodevelopmental disorder and has its onset in the developmental period. According to diagnostic and statistical manual of mental illnesses (DSM) 5, tic should have its onset before 18 years of age and can resolve with proper treatment. In this case, a 23-year-old female presented with recurrent abnormal throat clearing and excessive loud sounds which started for the last 1 year. Initially, she was diagnosed with psychogenic hiccup in another department and was treated with Baclofen 30 mg for 1 month but as no improvement was observed later she was referred to psychiatry outpatient department (OPD) for further treatment where she was diagnosed with adult onset vocal tic with a premonitory urge for tics scale (PUTS) score of 27 on admission and she was treated with tablet Risperidone 2 mg and after 4 weeks of treatment all symptoms subside and PUTS score came to be 6 at the time of discharge.

Keywords: Tic disorder, Adult onset, Psychogenic hiccup, Other specified tic disorder, Primary tic disorder

INTRODUCTION

A tic is a sudden rapid, recurrent non rhythmic motor movement or vocalization.¹ Tics typically involve one muscle or a group of muscles and may be characterized by their anatomical location, number, frequency, duration, and complexity. Movement of the limbs and other body parts is known as motor tics; involuntary repetitive sounds such as grunting, sniffing or throat clearing are called vocal tics.² Both motor and vocal tics are classified as simple or complex, simple motor tics are brief, abrupt, repetitive and seemingly non purposeful full movement involve one muscle group or body part.³ There is often a localized uncomfortable sensation (premonitory sensation) prior to a tic, and most individuals report an “urge” to tic. Tic disorder is a neurodevelopmental disorder and like all other neurodevelopmental disorders it also has its onset in the developmental period. Diagnostic classification systems (DSM 5 TR) require the onset of tics prior to the age of 18 years for the diagnosis of Tourette syndrome (TS- both multiple motor and one or more vocal tics),

persistent tic disorder, or provisional disorder (single or multiple motor or vocal tics). Tic can get resolved after proper treatment, but sometimes it may persist life long as chronic tic. Diagnosis of the specific disorder is based on few criteria like motor and/or vocal tic, duration of tic, age of onset of the tic and absence of any known medical condition and substance use.¹ Tic disorder can co-occur with some other conditions like autism, attention-deficit/hyperactivity disorder (ADHD), learning disorder and obsessive-compulsive disorder (OCD). For treatment of tic disorder, 1st line of management is considered to be behavioural treatment, recently risperidone and aripiprazole has been used to reduce symptoms and deep brain stimulation is listed as adjuvant treatment.⁴⁻⁶ average age of onset of tic disorder is between 4-6 years and more commonly reported among males rather than in females from 2:1 to 4:1.^{7,8} Tic disorders arising after 18 years of age are therefore categorized as “other specified tic disorder”.¹ According to some estimates, new onset tics with an underlying cause, such as drug use, brain injury, or neurodegenerative illness, account for half or one third of

people with tics. In acknowledgment of the substantial number of individuals described in the literature with secondary tics, the diagnostic and statistical manual of mental disorders (DSM 5), most recent edition, has added secondary and drug-induced tics as diagnostic categories. A few reviews and bigger clinical investigations have concentrated on secondary tics. Since adults are more likely to have acquired neurologic problems, have had trauma, or have been exposed to neuroleptics, adults are highlighted frequently in these descriptions.⁹⁻¹³ The topic of adult-onset, primary tics however has garnered little attention in the literature.

CASE REPORT

A 23-year-old female patient, resident of Berhampore, educated till BA second year, with well-adjusted premorbid personality, without any significant past surgical or psychiatric history, presented to the out-patient department with a complain of recurrent abnormal throat clearing and excessive loud sounds preceded by a feeling of uneasiness in her throat. She was very much distressed due to the recurrent nature of the movement and its uncomfortable noise. She was treated by department of gastroenterology with a suspected diagnosis of psychogenic hiccup, for 1 month with tablet Baclofen 10 mg 3 times a day. Along with this, she was prescribed tablet Pantoprazole 40 mg. She had no improvement in her symptoms with these treatments and all of the other departments opined that she was experiencing psychogenic hiccups or functional movements. Eventually, she was referred to psychiatry department for further management. On examination, it was revealed that she had vocal tics. Her throat clearing movement was brief, distressing and recurrent and non-rhythmic pattern. It was clearly a vocal cord movement, which was recurrent and non-rhythmic. With hard effort she was able to partially suppress her movements for 30-40 seconds with a sense of rising inner tension. No other vocal or motor tics were found in enquiry or examination. Examination by neurologist and otorhinolaryngologist did not reveal any problem in CNS or throat respectively. There were no significant findings on physical, neurological and mental state examination apart from excessive worry and tics. Her symptoms appeared gradually over the course of 1.5 years. According to her, the symptoms worsened with each passing day for the last several months, causing impairment in her everyday activities. She withdrew herself socially because she felt it was too embarrassing for her to be in public areas for these symptoms. She was extremely stressed as a result of this. Her mood had been low for the previous 7 months. She subsequently got low self-esteem. She found it quite difficult to concentrate. She started to feel excessive worry about her illness. Her symptoms were not associated with other medical condition and there is no history of substance use or long-term pharmacotherapy. There had been no evidence of intellectual decline. She denied any history of tics, attention deficit problem, obsessive-compulsive disorder, or impulse control issues disorder, or any other mental disorder. There was no history of obsessive,

histrionic, narcissistic, antisocial, or borderline personality traits prior to morbidity. There was no history of long-term drug use, brain injuries, seizures, encephalitis, chorea, dystonia, or any other involuntary movement problem. A diagnosis of 'other specified tic disorder' was made based on DSM 5 where presentations in which symptoms characteristic of a tic disorder that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for a tic disorder. Her cognitive functioning was intact. Her PUT score on admission was 27 and total tic severity score=21 (only vocal tic severity) and severity of impairment 50, severe level. So, total yale global tic severity scale (YGTSS) score was 71. On mental status examination her affect was depressed. She was put on tablet Risperidone 2 mg, tablet Escitalopram 10 mg, and tablet Clonazepam 0.5 mg for treatment. After one week of medication, the patient appeared to be responding well to this treatment. Her subjective distress was decreasing. After 3 weeks of the same treatment her PUTs score was 13. TTS score was 12 and severity of impairment 20. YGTSS score was 32. Investigation magnetic resonance imaging (MRI) – no abnormality detected serum ceruloplasmin – 35.4 ng/ml (within normal limits), and ASO – 48 IU/ml (within normal limits). All others blood investigation was normal. Laboratory, electrophysiological, and brain imaging investigations were within normal limits. After 4 weeks, all of her symptoms had subsided. Her subjective anguish vanished totally. Her PUT score became 6 and YGTSS score was 8. She was gradually regaining her premorbid condition and was discharged on the same medication with plans for frequent follow-up.

DISCUSSION

Tic is a sudden rapid recurrent non rhythmic motor movement or vocalization which is associated with a prior premonitory sensation. Tic is a neurodevelopmental disorder that usually presents before 18 years of age according to DSM-5. Tic can be primary or secondary in nature. Primary tic are idiopathic tics which are not related to any other medical conditions whereas, secondary tic are usually associated with such.¹⁴ In this case, the 23-year-old female was diagnosed with vocal tic that had begun for the last 1 year. In our case, no medical condition was identified to be aetiologically related to tics, and we found no abnormalities in our extensive workup and clinical examination, therefore we considered that the onset of tics was primary (idiopathic). No stressor was present that precipitated the onset of episodes, and there was no history suggestive of any gain. There were no history of episodes decreasing in isolation and increasing in presence of others and moreover, no significant improvement with any previous medications but a dramatic response with tablet Risperidone. Hence, we concluded it was not psychogenic hiccup. Based on the history provided by the patient and her relatives, as well as her signs and symptoms, clinical examination of the patient and rating scale, we may conclude that it is a case of adult-onset persistent primary

vocal tic disorder. Regarding the treatment, in most previous studies, treatment attempts with various medicines were typically unsuccessful, although there are rare exceptions.^{11,14,15} But the first medication administered in our case, Risperidone, had a remarkable effect on our patient. We did not find any obvious explanation for the dramatic response to treatment, probably a multifactor mechanism that applies to drug response in any condition was at work, which is nearly impossible to pinpoint precisely. The reason for reporting this case is that, according to the DSM, persistent vocal tics should appear before the age of 18. However, in our case, the onset was after the age of 18 years and in most situations, tics occurring after 18 are usually associated with brain injuries, long-term drug use, seizures and encephalitis. However, in our case, no such medical or psychiatric condition was recognised. To the best of our knowledge, our case is a rare, atypical presentation of tic disorder and highlights the significance of early psychiatric intervention for the best possible outcome.

CONCLUSION

Adult onset of tic disorder is quite unusual. Most reports depict adult-onset secondary tic disorders caused by trauma, encephalitis and other acquired conditions. There are few descriptions of primary adult-onset tics. Our case emphasises the unusual onset of tic disorder in adulthood in the lack of any obvious secondary reason. Treatment attempts are generally not successful, but this patient improved with our treatment protocols.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

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Cite this article as: Bose A, Nandi S, Sarkar AK, Paul S, Roy S, Baidya S. Beyond the 'tic' king clock: a case report on adult onset tic disorder. *Int J Community Med Public Health* 2024;11:2433-5.