

Tic Disorders, A Brief Review on The Epidemiology and Etiology

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Received Date: May 27, 2023 | Accepted Date: June 07, 2023 | Published Date: June 28, 2023

Citation: Behzad Saberi, (2023), Tic Disorders, A Brief Review on The Epidemiology and Etiology, *International Journal of Clinical Epidemiology*, 2(3); **DOI:**10.31579/2835-9232/029

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Abstract

Tic disorders are classified among the neurological and psychiatric disorders. Such disorders can be seen both in pediatric and adult patient groups. Tic disorders can be classified into two groups including primary and secondary ones.

This brief review tries to point to some notes about the epidemiology and etiology of Tic disorders. Having knowledge about the relevant epidemiology and etiology can be of help for the clinicians to approach the affected patients better both in terms of understanding the prevalence and also the etiology and underlying causes of such disorders in certain population of the patients.

Keywords: tic disorders; epidemiology; etiology; nervous system

Introduction

Tic disorders are classified among the neurological and psychiatric disorders and can be seen in both pediatric and adult patient groups. In one classification, Tic disorders can be classified into two groups including primary and secondary ones. This classification can be of help to understand the underlying causes for such disorders including various neurological and psychiatric pathologies.

Tourette's syndrome is a condition of the nervous system which causes a person to make sounds and movements which are involuntary in their nature and called Tics. According to an estimation of the Centers for disease control and prevention, diagnostic prevalence of Tourette's syndrome during the life would be about three in one thousands of people. According to the suggestion of some studies which are observational in their nature, with regard to the prevalence of Tic disorders in the pediatric patient groups, about 0.7 to 4.2 percent of children have some types of Tic disorders.

Many of the patients whom have some types of Tic disorders do not recognize them and therefore these patients do not seek medical treatment for their disorders. In these patients Tic disorders have a frequent manner with the coming and going pattern of the disorder. It is possible that Tic disorders in these patients would become developed more and the patients become aware of their disorders and then try to seek medical treatment [1,2,3].

There are various reasons which may trigger the appearance of such Tic disorders including internal body changes specifically in the functions of the nervous system and external environmental changes. The appearance of such Tic disorders in terms of the age is not much clear.

To study more about the appearance of such Tic disorders both in terms of the age of onset or environmental triggers, it is important to evaluate

various causes in different populations and in different countries specifically when it comes to evaluate the effects of environmental factors which can result in the appearance of Tic disorders. Internal body conditions and dysfunctions like various neurological and psychiatric pathologies which may cause Tic disorders to become apparent, can be seen in different populations with almost a common pattern. In this regard the clinical pictures are almost the same among different populations.

As it is already have pointed out, in terms of classification and in a simple manner, Tic disorders can be classified into primary and secondary ones with relevant causes.

Primary Tic disorders can be seen in Tourette's syndrome and chronic single and multiple motor disorders. Also, transient Tic disorder and vocal Tic disorder are classified among the causes for primary Tic disorders.

In the classification of the causes of the secondary Tic disorders, the inherited and also acquired causes should be considered.

Inherited causes for secondary Tic disorders can be some pathologies like Huntington's disease, neuroacanthocytosis, chromosomal abnormalities and torsion dystonia.

Acquired causes for secondary Tic disorders include various pathologies like degenerative, developmental, infectious and neurovascular ones and also external and medications.

Parkinson's disease, progressive supranuclear palsy, olivopontocerebellar atrophy, Shy-Drager syndrome, diffuse lewy body disease, parkinsonism-dementia-ALS complex and corticobasal ganglionic degeneration are among the degenerative causes. Mental retardation, autism, pervasive developmental disorder and static

encephalopathy are among the developmental causes. Sydenham's chorea, encephalitis and Creutzfeldt-Jakob disease are among the infectious causes. Stroke is among the neurovascular causes and trauma would be among the external causes for secondary Tic disorders.

Some medications including neuroleptics, stimulants, Levodopa and anticonvulsants can also cause secondary Tic disorders [3,4,5].

Conclusion

Tic disorders are classified among the neurological and psychiatric disorders. There are various conditions which can cause Tic disorders to appear including various pathologies. Having knowledge about the underlying causes for the appearance of Tic disorders including internal body factors and also environmental causes is of importance for the clinicians to approach the affected patients with more precision.

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