

Tourette Syndrome and Depression: A Case Report

Ilham Lagsyer^{1*}, Asmae Ech-chamikh¹, Asma Oumoussa¹, Imane Adali¹, Fatiha Manoudi¹

¹Mental Health Research Team, Ibn Nafis Psychiatric Hospital, Mohamed VI University Hospital, Marrakech, Morocco

DOI: [10.36347/sjmcr.2022.v10i05.023](https://doi.org/10.36347/sjmcr.2022.v10i05.023)

| Received: 24.03.2022 | Accepted: 02.05.2022 | Published: 29.05.2022

*Corresponding author: Ilham Lagsyer

Mental Health Research Team, Ibn Nafis Psychiatric Hospital, Mohamed VI University Hospital, Marrakech, Morocco

Abstract

Case Report

Tourette syndrome (TS) is a neuropsychiatric disorder characterized by multiple motor and one or more vocal/phonic tics; it is often associated with various psychopathological and/or behavioral comorbidities, including anxiety and depression. We report the case of a patient with Tourette syndrome suffering from psychological comorbidities, with the aim of studying its evolutionary aspects.

Keywords: Tourette syndrome, anxiety, depression, attention deficit hyperactivity disorder (ADHD), obsessive-compulsive behavior (OCB), psychological comorbidities.

Copyright © 2022 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

Tourette syndrome (TS) is a neuropsychiatric disorder with onset before 18 years of age, characterized by multiple motor and one or more vocal/phonic tics, (sudden, rapid, recurrent, non-rhythmic movements or vocalizations, including some simple forms, such as eye blinking, facial grimacing, and throat clearing; and some complex forms, such as body twisting, coprolalia (uttering socially inappropriate words, such as swearing) or echolalia (repeating the words or phrases of others) [1]. Tourette syndrome is often associated with various psychopathological and/or behavioral comorbidities, including anxiety, depression, attention deficit hyperactivity disorder (ADHD), obsessive-compulsive behavior (OCB) or disorder (OCD), and problems with impulse control and sleep [2].

More over Tourette syndrome and depression are both common disorders. It has been suggested that depression occurs in 13%–76% TS patients [3]. Despite this, there are few studies about the specific relations and correlates between the two disorders. There is only some consensus as to the precise relationship between the two disorders.

The aims of this observation is to study the association between depression and Tourette syndrome, and its evolutionary aspect in a patient followed in our outpatient department of the Ibn Nafis psychiatric hospital in Marrakech.

CASE REPORT

Mr. AE, 17 years old, single, second in a family of 2 kids, college student, he was followed for TS with a neurologist since his early age.

He presented to the psychiatric consultation following insomnia and irritability that has progressed for about 3 month.

Clinically the patient was anxious, had concerns about his health, had a selective attention deficit, lack of concentration, memory disorders, depressed mood and sleep onset insomnia.

To assess Depressive symptomatology we used the patient-administered Child Depression Inventory (CDI): a score of 16 was found. Anxiety was assessed using the self-administered MASC: a score of 73 was found. Sleep disorders were evaluated using the NHIS. We also administered the Conners ADHD/DSM-IV Scale (CADS) with a score of 61 and to assess the core tic symptoms and severity we administered the Yale Global Tic Severity Rating Scale (YGTSS): T-score 70.

A standard assessment was requested, returned normal. A brain MRI was done revealing no abnormalities.

The diagnosis of depressive disorder was confirmed, the patient was also found to have anxiety

disorder and moderate sleep disorder with marked tic symptoms.

Our attitude initially was to prescribe simultaneously an antidepressant based on fluoxetine (fluoxet 20 mg) and an anxiolytic (lorazepam at a dose of 7.5 mg).

The evolution was marked by an improvement in attention disorders, cognitive functioning, a reduction in anxiety load and an improvement in mood and sleep disorders.

DISCUSSION

The prevalence of Tourette syndrome is estimated at 1% of the general population [2, 3]. The symptomatology fluctuates between simple motor and vocal tics of moderate intensity up to very debilitating abnormal movements. The studies that were conducted on TS have found that psychopathological and psychiatric comorbidities are frequent in Tourette syndrome, and are thus found in about 85.7% of patients [3]. Obsessive compulsive disorders, attention deficit hyperactivity disorder, anxiety and depression are among the most common manifestations.

In Mr. AE's case, attention and concentration disorder, memory deficit and an adjustment disorder with anxiety and depressed mood were found. These complications associated with Tourette syndrome are probably of multifactorial causes and result from the combination of the chronic and severe nature of the disease, the special difficulties associated with it and the side effects of certain treatments such as neuroleptics. Other behavioral disorders described in Tourette syndrome include aggression, tantrums, antisocial behavior, and paraphilia.

Patient with TS are more likely to have depression and anxiety: depression occurs in 13% to 76% [3], while the presence of anxiety disorder has been reported in the range from 19%–80%, with a high-risk period for anxiety issues starting at age of 4, and a high-risk period for mood disorders beginning at age 7 [4, 5]. The occurrence of depression in patients with TS has been positively associated with an earlier onset, greater severity and a longer duration of tics [4-6]. Anxiety and depression should be routinely screened in children and youth with TS by MINI Kid 5.0 [7, 8], and properly assessed using the Multidimensional Anxiety Scale for Children (MASC) and the Children's Depression Inventory (CDI) when the symptoms are prominent and intervention is needed [5].

It has been proved that depression was associated with tic severity, anxiety, attention-deficit/hyperactivity disorder (ADHD), conduct disorder (CD), and behavioral problems. Moreover a positive family history of depression was also

incriminated in depression among patients with TS [9, 10].

CONCLUSION

Varied psychopathological and psychiatric manifestations can be found during Tourette's disease. Psychiatric symptoms such as depression, anxiety, psychosis and attention deficit disorder are very often associated with Tourette's disease. They can be the source of major suffering and disability, which can lead to the social isolation of patients.

Depression is significantly associated with TS factors such as tic severity, comorbidity with ADHD, the presence of coexistent anxiety, conduct disorder, and behavior problems. Depression is also importantly and significantly associated with a positive family history of depression.

The incidence of such manifestations, their clinical expressions, their exact pathogenesis and their relationship with tourette syndrome remain to be clarified.

REFERENCES

1. Achenbach, T. N. (1990). Manual for the Child Behaviour Checklist/4–18 and 1991 Profile. University of Vermont (Burlington), Department of Psychiatry.
2. Galland, F., Derost, P., Legrand, G., Noton-Durand, F., Mermillod, M., Auxiette, C., ... Jalenques, I. (2008). Manifestations psychopathologiques dans la maladie de Gilles de la Tourette. *Annales Médico-Psychologiques, Revue Psychiatrique*, 166(4), 324–326.
3. Rizzo, R., Gulisano, M., Martino, D., & Robertson, M. M. (2017). Gilles de la Tourette Syndrome, Depression, Depressive Illness, and Correlates in a Child and Adolescent Population. *Journal of Child and Adolescent Psychopharmacology*, 27(3), 243–249.
4. Sambrani, T., Jakubovski, E., & Müller-Vahl, K. R. (2016). New insights into clinical characteristics of Gilles de la Tourette syndrome: findings in 1032 patients from a single German center. *Frontiers in Neuroscience*, 10, 415.
5. Marwitz, L., & Pringsheim, T. (2018). Clinical utility of screening for anxiety and depression in children with Tourette syndrome. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, 27(1), 15-21.
6. Singer, H. S. (2019). Tics and Tourette Syndrome. *Continuum (Minneapolis)*, 25(4):936–58.
7. Sheehan, D. V., Sheehan, K. H., Shytle, R. D., Janavs, J., Bannon, Y., Rogers, J. E., ... & Wilkinson, B. (2010). Reliability and validity of the mini international neuropsychiatric interview for children and adolescents (MINI-KID). *The Journal of clinical psychiatry*, 71(3), 17393.

8. Liu, Y. X., Liu, J., & Wang, Y. F. (2011). Reliability and validity of Chinese version of the Mini International Neuropsychiatric Interview for Children and Adolescents (child version). *Chinese Mental Health Journal*, 25(1), 8-13.
9. American Psychiatric Association: (2013). Diagnostic and Statistical Manual of Mental Disorder, 5th ed. Washington, DC: American Psychiatric Association.
10. Chou, I. C., Lin, H. C., Lin, C. C., Sung, F. C., & Kao, C. H. (2013). Tourette syndrome and risk of depression: a population-based cohort study in Taiwan. *Journal of Developmental & Behavioral Pediatrics*, 34(3), 181-185.