Scholars Journal of Medical Case Reports
Abbreviated Key Title: Sch J Med Case Rep
ISSN 2347-9507 (Print) | ISSN 2347-6559 (Online)
Journal homepage: https://saspublishers.com

OPEN ACCESS

Mental Health

Functional Neurological Symptom Disorder in Adolescents: A Case Report

Rachid Rihab[1*], Kenny Soukaina[1], El Hilali Yosra[1], Adali Imane[1], Manoudi Fatiha[1]

[1]Mental Health Research Team, Ibn Nafis Psychiatric Hospital, Mohamed VI University Hospital, Marrakesh, Morocco

DOI: 10.36347/sjmcr.2022.v10i05.008 | **Received:** 29.03.2022 | **Accepted:** 04.05.2022 | **Published:** 10.05.2022

***Corresponding author:** Rachid Rihab
Mental Health Research Team, Ibn Nafis Psychiatric Hospital, Mohamed VI University Hospital, Marrakesh, Morocco

Abstract | **Case Report**

Functional neurological symptom disorder (FNSD) or conversion disorder (CD) as defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) include one or more symptoms of altered voluntary motor or sensory function. The diagnosis of CD was changed to FNSD and the definition has been updated since the last version of the DSM. We report here the case of a teenager patient who presented with a loss of consciousness, total functional impotence of both lower limbs and mussitations following FNSD, discussing this case in the light of the literature.

Keywords: functional neurological symptom disorder, conversion disorder, adolescent, Case Report.

INTRODUCTION

Functional neurological symptom disorder (FNSD) or Conversion disorder (CD) is a heterogeneous set of disorders characterized by neurological manifestations of multiple natures not explained by an underlying neurological lesion [1], as defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) [2].

The most prominent presentations of symptoms can include weakness, paralysis, trouble with swallowing, unusual speech, numbness, or unusual sensory problems or a mixture of symptoms [3, 4].

Functional neurological symptoms in children pose a problem for diagnostic evaluation and therapeutic management [5]. Few studies have been carried out to highlight data on the incidence, impact, associated factors and outcomes of SFN in children. One study reported an incidence of conversion disorder of 1.30/100,000 in children [6, 7].

PATIENT AND OBSERVATION

- Miss K.T, teenager of 17 years old, the third in a family of 5 kids, his parents are married, from a low socio-economic level Miss K. was sent to the child and adolescent psychiatric emergency room for neurological symptoms with an organicity assessment without abnormalities.
- Miss K had a medical history of generalized epilepsy since the age of 4 years old having stopped the treatment since the age of 12 years following the improvement of the symptomatology and the disappearance of the seizures. his mother has also been followed for depression for 3 years under antidepressant treatment with poor therapeutic observance.
- His development was marked by primary enuresis that persisted until the age of 12 and psycho-emotional development was marked by poor quality mother-child interactions limited to bodily maternal care resulting in Miss K's insecure attachment.
- The beginning of the symptomatology dates back to the age of 16 years by the progressive installation of a depressive symptomatology, coinciding with his romantic breakup and the resurgence of family conflicts.
- The depressive symptomatology was made up of: deep and permanent sadness, a tendency to isolation with social withdrawal, loss of interest and pleasure, anhedonia, great irritability, frequent and unexplained crying, feelings of guilt and self-depreciation, affective anesthesia towards his close entourage, concentration and memory problems with a drop in his school performance. the

symptomatology evolving in a context of loss of appetite and sleep disorders such as difficulty falling asleep with early morning awakening with superficial, restless and non-restorative sleep.

- The initial symptomatology subsequently worsened with the appearance of: somatic conversion crises which occurred on 3 occasions made up of loss of consciousness without convulsive movements or ocular deviation or post-critical amnesia with constant crying, total functional impotence of both lower limbs lasting 2 months and resolved spontaneously without residual signs and mussitations marked by lip movements without audible speech emissions occurring after resolution of the functional impotence, lasting 2 weeks and also resolved spontaneously.
- The patient was hospitalized in a neurology department where a neurological assessment was carried out consisting of a cerebral scanner, cerebral Magnetic resonance imaging, an electroencephalogram, a lumbar puncture and a complete blood assessment. the whole balance sheet came back without anomaly.
- After the elimination of an organic disorder the patient was sent to the child and adolescent psychiatric emergency room for diagnostic evaluation and therapeutic management.
- The psychiatric evaluation made of individual and family interviews and the passing of the scales of depression (BECK and HAMILTON), anxiety (SCARED) and self-esteem (Rosenberg) objectified a characterized depressive state.
- In view of the elimination of an organic etiology and the presence of a characterized depressive state, the diagnosis of functional neurological symptom disorder/ conversion disorder was retained for the patient.
- Miss K's care was based on the introduction of antidepressant treatment (Sertraline 50 Mg), with psychoanalytically inspired psychotherapy sessions combined with cognitive and behavioral therapy.
- The evolution was marked by a clear improvement of the initial symptomatology with stabilization of the mood.

DISCUSSION

The diagnostic and statistical manual of mental disorders -5 lists these criteria for conversion disorder (functional neurological symptom disorder):

A. One or more symptoms that affect voluntary body movement or sensory functions
B. Clinical findings compatible with a recognized neurologic condition.
C. The symptoms or disabilities are not better explained by another medical or mental disorder.
D. The symptom or disability cause significant clinical distress or impairment in social, occupational, or other important areas of functioning, or requires medical evaluation.

The ICD-10 code depends on the type of symptom

- With weakness or paralysis
- With abnormal movements (tremors, dystonic movements, myoclonus, gait disturbance)
- With swallowing symptoms
- With speech disorders (dysphonia, articulation disorder)
- With seizures or epileptiform seizures
- With anesthesia or sensory loss
- With specific sensory symptom (visual, olfactory or auditory disturbances)

With associated symptoms

Specify if

- Acute episode: symptoms present for less than 6 months.
- Persistent: Symptoms occurring for 6 months or more.

Specify if

- With psychological stressor (specify stressor)
- Without psychological stressor

The diagnosis of a functional neurological disorder is based on neurological examinations without abnormality or demonstrating that the disorder is not compatible with an organic neurological disease [8]. Volumetric MRI studies indicate that patients with functional neurological symptomatology have a difference in cortical and subcortical cerebral anatomy, thus, they found that patients with motor functional neurological disorders with unilateral limb weakness have decreased volumes in the lentiform, thalamic and caudate nuclei [9].

Researchers from Departments of Neurology and Psychiatry of Boston have published a study on the treatment for Patients with a Functional Neurological Disorder and they reported that the majority of patients with this disorder will require integrated multidisciplinary management of treatment, including physiotherapy cognitive-behavioral therapy and other treatment modalities (hypnosis, [10] psychodynamic-psychotherapy, psychoeducational interventions, transcranial magnetic stimulation over the motor cortex, and mindfulness-based psychotherapy) [11].

CONCLUSION

Functional neurological symptom disorder (FNSD) isn't a rare disorder, often associated with other psychiatric comorbidity. It requires early treatment, especially in children and adolescents.

REFERENCES

1. Vijayakumar, K., Alderson, L., Barkey, S., Griggs, H. M., Edwards, A., Phillips, K., ... & Prabhakar, P. (2012). Medically unexplained neurological

symptoms in children and adolescents: a study within who's International classification of functioning, disability and health framework. *Journal of Pediatric Neurology*, *10*(04), 247-255.

2. American Psychiatric Association, D. S., & American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5* (Vol. 5). Washington, DC: American psychiatric association.
3. Sharpe, M. (2002). Medically unexplained symptoms and syndromes. *Clinical Medicine*, *2*(6), 501.
4. Tsui, P., Deptula, A., & Yuan, D. Y. (2017). Conversion disorder, functional neurological symptom disorder, and chronic pain: Comorbidity, assessment, and treatment. *Current Pain and Headache Reports*, *21*, 29
5. Kozlowska, K., Nunn, K. P., Rose, D., Morris, A., Ouvrier, R. A., & Varghese, J. (2007). Conversion disorder in Australian pediatric practice. *Journal of the American Academy of Child & Adolescent Psychiatry*, *46*(1), 68-75.
6. Ani, C., Reading, R., Lynn, R., Forlee, S., & Garralda, E. (2013). Incidence and 12-month outcome of non-transient childhood conversion disorder in the UK and Ireland. *The British Journal of Psychiatry*, *202*(6), 413-418.
7. McFarlane, F. A., Al. (2019). Cognitive-behavioural treatment of functional neurological symptoms (conversion disorder) in children and adolescents: A case series. *The European Journal of Paediatric Neurology*, *23*, 317–328
8. Stone, J., Carson, A., & Sharpe, M. (2005). Functional symptoms and signs in neurology: assessment and diagnosis. *Journal of Neurology, Neurosurgery & Psychiatry*, *76*(suppl 1), i2-i12.
9. Atmaca, M., Aydin, A., Tezcan, E., Poyraz, A. K., & Kara, B. (2006). Volumetric investigation of brain regions in patients with conversion disorder. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, *30*(4), 708-713.
10. Chew, F. S. (2010). Patient sedation without medication: rapid rapport and quick hypnotic techniques: a resource guide for doctors, nurses, and technologists. *Academic Radiology*, *12*(17), 1585-1586.
11. O'Neal, M. A., & Baslet, G. (2018). Treatment for patients with a functional neurological disorder (conversion disorder): an integrated approach. *American Journal of Psychiatry*, *175*(4), 307-314.