

Functional neurological disorder during the perinatal period: A case report

Edgar Samuel Kanniah, MRCPsych¹, Natasha Subhas, MMedPsych², Umi Adzlin Silim, MMedPsych³, Jiann Lin Loo, DrPsych⁴, Thaneswari Tharumalingam, MRCP⁵

¹Department of Psychiatry and Mental Health, Hospital Selayang, Ministry of Health Malaysia, Selangor, ²Department of Psychiatry and Mental Health, Hospital Tengku Ampuan Rahimah, Ministry of Health Malaysia, Selangor, ³Department of Psychiatry and Mental Health, Hospital Serdang, Ministry of Health Malaysia, Selangor, ⁴Ty Derbyn, Wrexham Maelor Hospital, Betsi Cadwaladr University Health Board, United Kingdom, ⁵Department of Internal Medicine, Hospital Tengku Ampuan Rahimah, Ministry of Health Malaysia, Selangor

SUMMARY

Functional neurological disorder (FND) is a rare neuropsychiatric illness that commonly presents to the medical setting as opposed to the psychiatric setting. FND is characterised by signs and symptoms affecting the voluntary motor or sensory function that cannot be explained by a specific neurological or general medical condition. FND in pregnancy and postpartum is rare. We report here a case of FND in a 32-year-old woman who presented with multiple medical problems during her perinatal period. She exhibited 'la belle indifférence', history of vague unexplained medical symptomatology while all relevant investigations were normal. There were long-standing psychosocial and interpersonal difficulties with significant distress including multiple personal, marital, and family issues which stemmed from her childhood. This left her feeling inadequate as a mother to her infant. The diagnosis of FND was finalised by the multidisciplinary team consisting of a neurologist, physicians, and psychiatrists, based on longitudinal assessment. Psychological intervention for the patient included psychoeducation, supportive psychotherapy, stress management, and parental intervention. The key point in our management of the patient was the delivery of the diagnosis to help her understand the illness and treatment plan. For this patient, functional and psychological recovery is achievable with a good therapeutic alliance, early diagnosis of the illness, and the acceptance of her diagnosis.

INTRODUCTION

Functional neurological disorder (FND), or previously known as conversion disorder, is a neuropsychiatric disorder characterised by signs and symptoms affecting voluntary motor or sensory function that cannot be explained by a neurological or general medical condition.^{1,2} Sigmund Freud hypothesised that the occurrence of these functional symptoms reflected a repressed idea or unconscious conflict.³ The development of FND is in response to any stressor – mainly due to affective stress, impaired emotional processing, and maladaptive coping response.⁴ Despite any definitive medical diagnosis, it is evident that these patients experience distressing physical symptoms that are not deliberate or controlled at will.³ Risk factors of FND include women, lower educational level, lower socioeconomic background or coming from rural areas, and history of sexual or physical

abuse.³ FND is a low prevalence neuropsychiatric illness that often presents to medical settings as opposed to psychiatric settings.⁴ FND symptoms can often be missed.^{3,4} Approximately 30% of referred neurology outpatients have medically unexplained neurological symptoms.^{3,4} It is estimated that up to 25% of patients in the general hospital have individual symptoms of FND, with 5% fulfilling the criteria of the disorder.^{3,4} This case report highlights a lady, J, diagnosed with FND during the perinatal period.

CASE REPORT

Madam J is a newly wedded 32-year-old para 1 lady with a history of neurogenic bladder since she was 19 years old and multiple drug allergies. From her seventh month of pregnancy till her delivery, she was admitted to the obstetrics ward for inpatient treatment of recurrent urinary tract infection (UTI). She developed an anaphylactic reaction (evidenced by pruritic rash) and developed a seizure after being served mefenamic acid for pain management on the second day of delivery, which warranted a transfer to the medical ward for further observation. While she was in the medical ward, she developed an acute headache, vomiting, and fainting episode when discharge planning was made. Although there was no fever and sign of meningism, the medical team started intravenous ceftriaxone 2g BD as an empirical coverage for meningococcal meningitis given the sudden onset of an unexplained seizure and fainting episode while waiting for the investigation results, including full blood count (FBC), C-reactive protein level (CRP), computed tomography (CT) of the brain, and video electroencephalography (EEG). Other than lumbar puncture which she refused, all investigation results were normal, and EEG showed no epileptic activities. Thus, ceftriaxone was stopped after five days, and she was referred to the psychiatric team for a psychological assessment.

During the first assessment, there was no psychopathology of major psychiatric illness identified. As J had the capacity and she refused to let the team speak to her family, the team was not able to corroborate the history of absence of significant psychosocial stressors although the team was aware that her newborn was taken care of by her mother-in-law throughout her admission. Since there was no safeguarding concern, she was discharged, and a psychiatric appointment was provided although she did not turn up.

This article was accepted: 16 September 2021

Corresponding Author: Natasha Subhas

Email: nats085@yahoo.com

A week after her discharge, J was readmitted to the medical ward for multiple nonspecific symptoms, including generalised body weakness, headache, vomiting, and lethargy. Multiple episodes of sudden self-aborted unprovoked generalised jerky body movement with retained consciousness were observed on top of change of behaviour, where she became less communicative. Again, FBC, CRP, CT brain, and video EEG was repeated and it showed no abnormality. Given the inconsistently observed seizure semiology, the diagnosis of psychogenic non epileptic seizure (PNES) was made by the neurologist, and the psychiatric team was involved in her care again.

The longitudinal assessment of her previous admissions revealed the trend of J displaying new symptoms whenever she was scheduled for a discharge. Strangely, she was not distressed about the various 'medical problems', which indicated '*la belle indifférence*'. With the improved therapeutic alliance, J finally consented the psychiatry team to contact her husband, which revealed that J had multiple personal, marital, and family issues which stemmed from her childhood. J came from a deprived large family which she did not have a close relationship since young and hence she rarely turned to them for support during her difficult times. This background had moulded her into an introvert who was self-reliant and internalise her problems as a form of coping. Childbirth was a major stressor for her given she was a first-time mother. As she was far from her extended family and her husband needed to go outstation for work, she experienced a sense of isolation in the new city, she had no role model to refer to and no support to turn to. Being a new mother had brought back painful memories of her childhood and reminded her of her own poor relationship with her parents. This resulted in poor bonding with her infant son, and she was unable to breastfeed him.

The diagnosis of FND was finalised by the multidisciplinary team consisting of a neurologist, physicians, and psychiatrists, based on the longitudinal assessment. Experts have highlighted that communication of the diagnosis of FND to the patient and their families is done by the neurologists with the early involvement of mental health professionals.⁵ Psychoeducation of her diagnosis was given to both her and her husband and supportive psychotherapy was provided based on the strategies of LaFrance Jr and colleagues (2013). J was explained that her seizures were nonepileptic in nature, as evidenced in the EEG findings. Her seizures were precipitated by emotional stress, predisposed by her childhood experience rather than a medical condition. Her physical symptoms and psychological distress were validated and reassurance of the absence of a serious medical condition was provided. Outpatient psychological treatment was explained, and we offered to help her to process her emotional difficulty. As part of stress management, J was taught deep breathing exercises and progressive muscle relaxation techniques to be practiced daily. These techniques activate the natural relaxation response of the body to effectively combat stress. Parental intervention was done between the psychiatrists, J and her husband about the direction of care of her baby and her support system. This was done to ensure that both J, and her baby would be in a safe

environment upon discharge and help her mobilize support from the people around her.

J accepted her diagnosis and she was successfully discharged without the development of further physical symptoms. Overall, J showed a fair prognosis in terms of a good therapeutic alliance, early diagnosis, and accepting her diagnosis, predicting a better outcome for her in this case.⁶ As she was going to relocate, she was referred to another tertiary centre to continue her psychiatric treatment. Nevertheless, she did not attend the follow-up in the referred centre, and she had not turned up to seek treatment for any medical condition, which indicated her FND had resolved.

DISCUSSION

1. DIAGNOSIS

J had hallmarks of FND, a somatic symptoms disorder. J had '*la belle indifférence*', history of vague unexplained medical symptomatology including PNES. All relevant investigations were normal. Psychiatric assessment discovered long-standing psychosocial and interpersonal difficulties and significant distress of not being able to function as a mother to her infant and having lack of support.

2. MANAGEMENT OF FND

There is no algorithm or empirically supported guidelines in the treatment of FND.^{3,4} The core feature is the absence of organic or neurological illness.^{3,4} Patients like J may not be receptive to the diagnosis of FND nor will they accept the psychological explanations of FND. The key to successful treatment would be establishing a strong therapeutic alliance with J and incorporating psychotherapy into her management.

3. FND IN PERINATAL PERIOD

Psychiatric disorders during the perinatal period can have a significant impact on maternal health, birth outcomes, foetal development, and relationship with infant.⁷ Studies on the management of FND in the perinatal period are limited, however, the management is similar to the standard of care of other FND cases with some adaptation considering the current post-natal state.⁸

The key step in the delivery of the diagnosis to the patient is to help them understand their illness and treatment plan.⁸ The psychodynamics of the disorder and the role in pregnancy and motherhood should be explored, as well as the patient's gain from sick role.⁸ Any stigma that the patient or her family might have in seeking psychiatric treatment during the perinatal period should be addressed and proper destigmatisation and psychoeducation are imperative.⁹ Besides that, clinicians should also look out closely for common psychiatric disorders that tend to occur during the perinatal period including postpartum depression and psychosis.⁷

Experts have suggested a multidisciplinary involvement for the management.⁷ Close communications between the psychiatric, neurology, and primary care team is important in the continuation of care of the patient with FND.⁸ The

pregnant or postpartum women should be engaged to ascertain their emotional well-being and need for further psychiatric care.⁹ The patient's maternal capacity to care for her child should also be regularly assessed to ensure that the baby and mother are in a safe environment for optimal childcare.⁹

CONCLUSION

This case highlights the physical manifestation of underlying psychological stress which was precipitated by childbirth and the key to helping the client is the supportive manner of delivering the diagnosis and further treatment plan.

ACKNOWLEDGEMENT

The authors would like to thank the Director General of Health, Malaysia for his permission to publish this article. The authors are grateful and thankful to the patient for giving us permission to publish this article.

CONSENT

Written informed consent was obtained from the patient for publication of this case report.

COMPETING INTERESTS

The authors declare that they have no conflict of interest.

AUTHORS' CONTRIBUTIONS

ESK, NS, and TT were part of patient's treating team and conceptualized the case with UAS's input. ESK and NS drafted the manuscript. ESK, NS, UAS, and JLL critically reviewed and revised the manuscript. All authors have read and approved the final manuscript.

REFERENCES

1. Demartini B, D'Agostino A, Gambini O. From conversion disorder (DSM-IV-TR) to functional neurological symptom disorder (DSM-5): When a label changes the perspective for the neurologist, the psychiatrist and the patient. *J Neurol Sci* 2016; 360: 55-6.
2. Fobian AD, Elliott L. A review of functional neurological symptom disorder etiology and the integrated etiological summary model. *J Psychiatry Neurosci* 2019; 44(1): 8-18.
3. Ali S, Jabeen S, Pate RJ, Shahid M, Chinala S, Nathani M, et al. Conversion Disorder- Mind versus Body: A Review. *Innov Clin Neurosci* 2015; 12(5-6): 27-33.
4. Rancourt D, Darkes J. Conversion Disorder (Functional Neurological Symptom Disorder) in Primary Care Mental Health. *Clinical Case Studies* 2019; 18(1): 54-68.
5. LaFrance Jr WC, Reuber M, Goldstein LH. Management of psychogenic nonepileptic seizures. *Epilepsia* 2013; 54 Suppl 1: 53-67.
6. Feinstein A. Conversion disorder. *CONTINUUM: Lifelong Learning In Neurology*. 2018; 24(3): 861-72.
7. Paschetta E, Berrisford G, Coccia F, Whitmore J, Wood AG, Pretlove S, et al. Perinatal psychiatric disorders: an overview. *Am J Obstet Gynecol* 2014; 210(6): 501-9.
8. Toor R. Young, pregnant, ataxic—and jilted. *Current Psychiatry* 2015; 14(1): 44-9.
9. Dennis CL, Chung-Lee L. Postpartum depression help-seeking barriers and maternal treatment preferences: A qualitative systematic review. *Birth* 2006; 33(4): 323-31.