

CASE REPORT

A CASE OF CONVERSION DISORDER ASSOCIATED WITH AN ARACHNOID CYST

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Abstract

Objective: This case report highlights arachnoid cyst, a rare benign space-occupying lesions (SOL) formed by an arachnoid membrane containing cerebrospinal fluid (CSF) which in most cases, are identified by accident. Conversion disorder is characterized as a deficit or distortion in neurological functioning, or symptoms suggesting a general medical condition that is not referable to an organic lesion.

Methods: We report a case of a 24 year old woman who came to a psychiatrist with history of suicide attempt. She had a history of failed marriage but no history of substance abuse. She had a history of dizziness, light-headedness, blurred vision, seizure and headache for a while. Seizure was identified to be pseudo seizures in further assessments. **Results:** Diagnosis of Conversion Disorder with Adjustment Disorder was revealed. In Barin Computerized Tomography (CT) scan there was an extra axial cystic lesion with the height, frontooccipital and lateral size of approximately 6.4 cm by 4 cm by 2.5 cm respectively in the left anterior middle fossa and Sylvian fissure. Based on patient's history, the arachnoid cyst and its symptoms may have a synergistic effect on patient's symptoms of conversion disorder.

Conclusion: This case reflects the importance of ruling out medical problems in patients with psychiatric symptoms. *ASEAN Journal of Psychiatry, Vol. 13 (1): January – June 2012: XX XX.*

Keywords: Conversion Disorder, Arachnoid Cyst, Case Report

Introduction

Arachnoid cysts are rare, benign space-occupying lesions formed by an arachnoid membrane containing cerebrospinal fluid (CSF). In most cases they are identified by accident [1]. It represents 1% of all non-traumatic intracranial expansive processes. It can lead to compression of the surrounding parenchyma and obstruction of efficient flow of cerebrospinal fluid the symptoms depends on its size and location of the lesion. The most common symptoms include headache and seizures. The most popular treatment for this lesion is surgery indicated the

presence of hydrocephalus or intracranial hypertension [2].

Conversion disorder has been used instead of "hysteria" in newer version of classification systems (DSM-IV and ICD-10). Conversion disorder is characterized as "a deficit or distortion in neurological functioning, or symptoms suggesting a general medical condition that is not referable to an organic lesion". Presentations can encompass any nervous system activity that is somewhat spontaneous and this include psychogenic dementia [3]. Although the diagnosis of

conversion disorder is controversial but there is no doubt that it causes significant disability [4].

It is improved that there is a relationship between mental and physical symptoms. Although symptoms suggesting conversion disorder are not referable to an organic lesion but medical disorders must be included in all psychiatric disorders. Existence of current or previous comorbid neurological disorders in diagnosed conversion disorder patients is reported to have an evidence of 18% to 64% [5].

The prevalence of arachnoid cysts is significantly elevated in psychiatric patients, indicating a probable causal link between arachnoid cysts and psychiatric disorder [6]. It is mostly reported in psychotic patients [1, 7-11] and there are a few reports of coexistence of arachnoid cyst and conversion disorder [12].

We report a case who presented to the psychiatrist with suicide attempt that has neurological symptoms simultaneously.

Case Presentation

A 24-year-old woman was presented to the psychiatrist with history of a suicide attempt. She also had a history of suicide attempt by hurting herself. She suffered recurrent major depression following a failed marriage and divorce one year ago. Her parents also had been divorced. Patient had weight loss, anorexia and insomnia. She had a history of dizziness, light-headedness, blurred vision, seizure and headache for a while. Perinatal and childhood history was uneventful. Substance history was negative. Family history of any psychiatric disorder was

negative. She was admitted in hospital in an aggressive state and high risk of self-harm. She had been sitting on her bed and sleeping all day long. She had tied her scarf around her head and complaining of headache.

Detailed physical examination revealed neither clinically significant neurological. It is through observation or radiological texts demonstrated that her seizures were pseudo seizure. Blood pressure was 110/65mm Hg in supine position without any postural fall. Laboratory studies were negative for any physical illness. Fundus examination, ECG, and x-ray of the cervical spine did not reveal any abnormality.

Patient had gained a huge amount of attention at her previous suicide attempt. At that time she had dizziness and headache. She was walking and talking in the ward most of her time. She had a depressed mood and complained of somatic symptoms affected patient's function and activities. Patient was diagnosed as conversion disorder accompanied by an adjustment disorder. She was treated with Citalopram (tablet 20 mg, 1/day), Trifluoperazine (tablet 5 mg 1/day), Clonazepam (tablet 1 mg, 1.5 tablets/day at the time of sleep), Gabapentin (tablet 100 mg, TDS) and Sodium Valproate (tablet 200 mg, BID) together with psychotherapy.

A brain CT scan revealed an extra axial cystic lesion with the height, frontooccipital and lateral size of approximately 6.4 cm by 4 cm by 2.5 cm respectively in the left anterior middle fossa and Sylvian fissure that was most likely to be an arachnoid cyst.



Figure 1: A brain CT scan revealed an extra axial cystic lesion in the left anterior middle fossa and Sylvian fissure suggestive of an arachnoid cyst. (Left)



Figure 2: The Arachnoid Cyst had penetrated to ipsilateral Sylvian Fissure. (Right).

At the time of discharge, patient had mild depression but no self harm behavior. She was

referred to neurosurgeon for excision of the cyst.



Discussion

This case report discusses the possibility of a causal relationship between the CT scan - identified lesion, the somatic symptom, and conversion disorder. It is now approved that there is brain functional defects in most of psychiatric disorders. In a study there were psychiatric disorders in 7 cases of posterior fossa abnormalities containing 2 cases of somatoform disorders [13].

Our knowledge about arachnoid cyst is limited. They mostly have congenital origin [14] and are commonly discovered incidentally during imaging processes for unrelated symptoms or post-mortem during autopsy [15]. Some articles suggest that there is an etiologic relationship between arachnoid cysts and psychiatric disorders [9]. Since the coexistence of arachnoid cyst and conversion disorder is rare [12] and diagnosis of conversion disorder itself is controversial it is difficult to be absolutely certain that lesion had effect on the patient's psychiatric symptoms or not. Although there must be no neurological defect to make diagnosis of conversion disorder but a significant number of researches determined functional defects in related areas of brain [4]. In a study using PET to compare three patients

with weakness due to a conversion syndrome with both normal controls and controls instructed to feign weakness, patients with conversion syndrome showed hypoactivation of their left dorsolateral prefrontal cortex (LDLPFC) during a simple motor task whereas others showed normal function [16]. Based on this patient's history that she had no family history of psychiatric disorder and the severity of somatic symptoms increased at the second time and patient had got relative remission that was less than expected level we can say that arachnoid cyst and its symptoms may had a synergism effect on patient's symptoms of conversion disorder.

As noted in other studies arachnoid cysts may cause symptoms including headache and seizures and mild Cognitive disorders such as deficit of memory and control functions in neuropsychological tests [9, 17-19].

Conclusion

The most important outcome from this case is the importance of ruling out medical problems in patients with psychiatric symptoms. Some lesions might remain undetected in coverage of normal physical and neurological examinations and laboratory findings and patient might

undergo processes that even could be dangerous and life threatening. This patient had undergone electroconvulsive therapy (ECT) in the past, and this contraindicated in arachnoid cyst. The close collaboration between neurologists, consultation-liaison psychiatrists, psychologists, and general practitioners is necessary to gain most effective results of treatment.

Deceleration of interest: None

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