

A Rare Case of Porencephaly with Seizure Disorder, Organic Personality Change and Agitated Depression

Nöbet Bozukluğu, Organik Kişilik Değişikliği ve Ajite Depresyon ile Nadir Bir Porensfali Vakası

Shaktidevi G Rayaji¹, Aswath Manju¹, Lakshmi V Pandit¹, Haradanahalli Giriprakash Kshamaa¹

Öz

Porensfali, serebral yarım küredeki kistler/boşluklar ile karakterize bir merkezi sinir sistemi bozukluğudur. Nöbetler, parezi, öğrenme güçlükleri, zeka geriliği ve nadiren psikiyatrik belirtiler gibi çeşitli klinik belirtilere sahiptir. Psikiyatrik belirtiler arasında psikoz en sık görülen belirtidir. Psikiyatrik sendromlarla başvuran porensfali ile ilgili sadece birkaç vaka raporu vardır. Bu vaka sunumunda nöbet bozukluğu, organik kişilik değişikliği ve ajite depresyon ile benzersiz bir porensfali vakasının tartışılması amaçlandı.

Anahtar Kelimeler: Porensfali, organik beyin sendromu, depresyon, olgu sunumları

¹Kempegowda Institute of Medical Sciences Hospital, V V Puram, Bangalore

Address correspondence to: Haradanahalli Giriprakash Kshama, Kempegowda Institute of Medical Sciences Hospital, V V Puram, Bangalore

e-mail: kshamaa.hg@gmail.com

Geliş Tarihi/Received: 1 June 2022

Kabul Tarihi/Accepted: 8 September 2022

Abstract

Porencephaly is a disorder of Central nervous system characterized by cysts/ cavities in the cerebral hemisphere. It has varied clinical manifestations like seizures, paresis, learning disabilities, mental retardation and rarely psychiatric manifestations. Among psychiatric symptoms, psychosis is the most commonly seen manifestation. There have been only few case reports of porencephaly presenting with psychiatric syndromes. Hereby it was aimed to discuss a unique case of porencephaly with seizure disorder, organic personality change and agitated depression.

Key words: Porencephaly, organic brain syndrome, depression, case reports

Cite this article as: Rayaji SG, Manju A, Pandit LV, Kshamaa HG. A Rare Case of Porencephaly with Seizure Disorder, Organic Personality Change and Agitated Depression. Selcuk Med J 2023;39(1): 41-43

Disclosure: None of the authors has a financial interest in any of the products, devices, or drugs mentioned in this article. The research was not sponsored by an outside organization. All authors have agreed to allow full access to the primary data and to allow the journal to review the data if requested.



"This article is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/) (CC BY-NC 4.0)"

INTRODUCTION

Porencephaly is a disorder of central nervous system characterised by cysts/cavities in cerebral hemisphere. It is either congenital or acquired, incidence being 3.5 in 1,00,000 live births (1). The most common clinical manifestations based on localisation are seizures, mental retardation, paresis, learning disabilities and rarely psychiatric symptoms (2). Among psychiatric manifestations, psychosis is most commonly seen and involvement of prefrontal cortex and temporal lobe has been reported.

In this case report, it was aimed to discuss a unique case of porencephaly with seizure disorder, organic personality change and agitated depression.

CASE

Mr. X, a 55 year old male, pre-morbidly well adjusted with no significant family history, presented to psychiatry OPD with 15 years history of multiple episodes of loss of consciousness, lasting for 10-15 minutes followed by confusion and headaches for the next 3-4 hours, last such episode being 2 years ago. Following the onset of these episodes, family members have noticed changes in his behaviour, in the form of decreased interaction with family members, staying aloof and decreased interest in work. He was also not as active as he used to be. The patient, who would handle all finances by himself previously, with respect to calculations, counting and profits was observed taking help of family members for the same since past few years. He also would get irritated with trivial issues in the house like any change in the taste of the food or delay in work done at home which was not his usual self. He was sleeping and eating well during this time. Overall family members felt that he had become dull and restless. Even though he had these behavioural changes, the family members did not feel the need for consultation as his functioning was not impaired, hence treatment was not sought.

Since the past 20 days patient was feeling sad with frequent crying spells, had marked disturbance in sleep and had reduced appetite. Onset of these symptoms was following a stressful situation. Patient had supported his son in contesting for the Gram Panchayat elections and had spent 10 lakh rupees for the campaigning and election work. However, son had lost the elections 20 days back. Following this patient was irritable, fidgeting and was often seen crying alone. He would also talk to himself about how he lost the money and the way people had betrayed him by not voting for his son. He would constantly ruminate

about the event and would feel that he should have not asked his son to contest the elections. He was not interested in taking food and would hardly eat anything, and when forced to eat he would get angry and would dismiss the family members. He would not sleep at night, would pace around the house and kept worrying about the elections and the loss. His duration of sleep reduced to around 2-3 hours per day. Patient started getting agitated if family members spoke to him or would ask him to eat food and sleep. This behavior worsened over 10 days for which he was brought for consultation.

On Mental Status Examination, patient was unkempt, restless and cried during the interview; had increased volume, decreased tone of speech and was ruminating about the stressful situation. He appeared agitated and depressed throughout the interview although subjectively he reported that he was fine. He was alert and the concentration was sustained with no memory dysfunction. He was evaluated as an in-patient, where in relevant blood investigations were done, which were within normal limits. In view of his age, onset of the symptoms and previous episodes of loss of consciousness, MRI Brain and EEG was done. MRI Brain revealed existence of a Porencephalic cyst in left temporal occipital region of size 3.6x2.7x2.7. EEG did not show any abnormality. Neurology opinion was sought for the above findings, where in no active

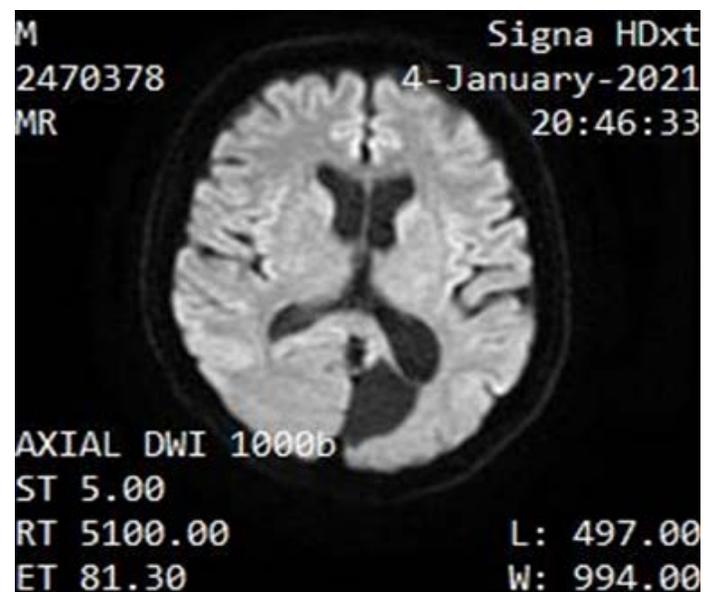


Figure 1. The appearance of a Porencephalic cyst in left temporal occipital region of size 3.6x2.7x2.7 in MR imaging

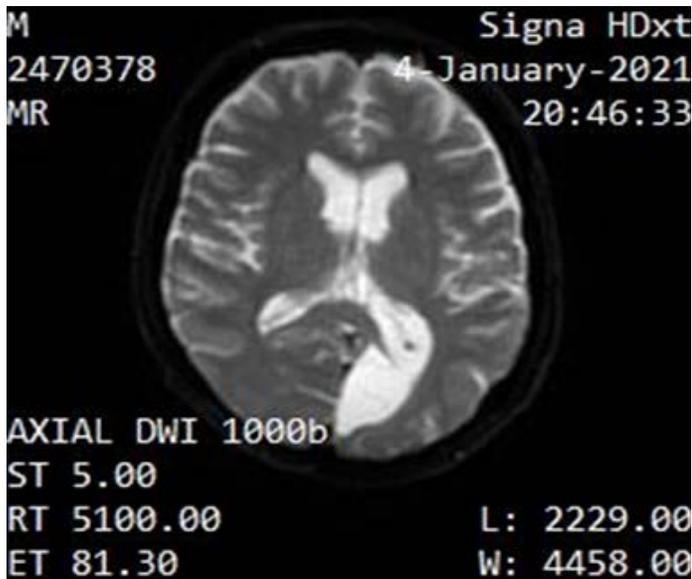


Figure 2. The appearance of a Porencephalic cyst in MR imaging of the patient

intervention was advised. No anti epileptics were started as the last episode of loss of consciousness was 2 years ago. Differential diagnosis of Vascular Dementia was considered as he was a case of Coronary Artery Disease since 2 years on medical management. However MMSE was 28. A diagnosis of adjustment disorder was also considered, but the symptoms were very severe affecting day to day functioning. Hence the current diagnosis of seizure disorder, Organic personality change with Severe depression without psychotic symptoms (ICD-10) i.e., Agitated depression was made. Patient was started on anti-depressants (Sertraline) and anti-anxiety drug (Clonazepam) and was discharged after 1 week. Since then patient was seen on regular follow up with gradual improvement in symptoms.

DISCUSSION

Porencephalic cyst is a malformation of cerebral cortex. It is usually Congenital and can be acquired following stroke or infection. Affected individuals present with mental retardation, seizures, paresis, learning disabilities and psychiatric symptoms (3). One case of late onset psychosis following stress has been reported in right medial frontal lobe porencephalic cyst (4). Another case of left frontal and temporal lobe involvement presented with psychosis in a 25 year old female with no past or family history of psychiatric illness (5). A rare case with epilepsy,

infantile hemiplegia and antisocial personality showed the presence of a left-sided congenital cyst (6). A case of anger outbursts was also reported in a case of left fronto-temporal porencephalic cyst (7). However we have here discussed a patient presenting with seizures, organic personality change and agitated depression with presence of porencephalic cyst in the left temporal occipital region which has not been reported so far. It is still unclear if these manifestations concur by chance or if Porencephaly is the causal factor. The area of Porencephalic cyst seems to be of relevance. This case highlights the need for further research on Porencephaly and its presentations in Psychiatry.

Consent: written and informed consent was obtained from patient for publication of this case report.

Conflict of interest: Authors declare that there is no conflict of interest between the authors of the article.

Financial conflict of interest: Authors declare that they did not receive any financial support in this study.

Address correspondence to: Haradanahalli Giriprakash Kshamaa, Kempegowda Institute of Medical Sciences Hospital, V V Puram, Bangalore
e-mail: kshamaa.hg@gmail.com

REFERENCES

1. Wynne D, Jalil MF, Dhillon R. Endoscopic fenestration of a symptomatic porencephalic cyst in an adult. *World Neurosurgery* 2020;141:245-6.
2. Oommen AT, Sethy G, Minz NT, et al. Unusual presentation of porencephalic cyst in an adult. *J Clin of Diagn Res* 2017;11(2):OD12.
3. Ho SS, Kuzniecky RI, Gilliam F, et al. Congenital porencephaly: MR features and relationship to hippocampal sclerosis. *American J Neuroradiology* 1998;19(1):135-41.
4. Noyan OC, Salcini, Talu BS, Eryilmaz G. Porencephalic cyst and late onset brief psychotic disorder. *Case Reports* 2016;2016:bcr2016215098.
5. Douzenis A, Rizos EN, Papadopoulou A, et al. Porencephaly and psychosis: A case report and review of the literature. *BMC Psychiatry* 2010;10(1):1-4.
6. Varma SL, Chadrasekaran S, Mohamad M, et al. Antisocial personality disorder with porencephalic cyst. *European Psychiatry* 1992;7(1):45.
7. Singh RK, Chaudhury S, Diwan C, et al. Porencephaly presenting with anger outbursts: A case report. *Panacea J Med Sci* 2018;8(3):126-7.