

P17. A Case Report on Catamenial Epilepsy

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A case of a 17-year old nulligravid with onset of seizure episodes at menarche is reported. Seizures attributable to vascular disorders, infections, trauma, autoimmune, metabolic or toxic causes, neoplastic, structural or congenital disorders were all ruled out. Patient was treated with Phenobarbital, providing a two year seizure-free period. However, she was noted to be impatient, irritable, and exhibited aggressive behavior. Psychiatric consult was done and was started on Clozapine, Sodium Valproate plus Valproic Acid. Due to behavioral problems and poor concentration, patient was forced to stop school.

Two years prior to consult, seizure recurrences were noted to coincide with menstruation, specifically from day -5 to +8. Phenobarbital was tapered and was shifted to Lamotrigine. Despite dose adjustments of Lamotrigine, persistence of seizure attacks prompted referral to the Reproductive Medicine service for adjunctive hormonal therapy. The regularity of the patient's seizure attacks coinciding with the menstrual period makes Catamenial Epilepsy a likely diagnosis. It is defined as having more than 75% of seizure attacks during a 10-day period of the menstrual cycle, beginning 4 days before menstruation and 6 days after its onset. This is the first documented local report on Catamenial Epilepsy.

Antiepileptic drugs (AEDs) are the mainstay treatment of Catamenial Epilepsy. The role of estrogen and progesterone in neuronal development and plasticity due to their capacity to regulate synthesis, release and transport of neurotransmitters sheds light on the pathogenesis of Catamenial Epilepsy. Depot medroxyprogesterone acetate (DMPA) was given in addition to Lamotrigine which provided seizure control. The absence of seizure exacerbations also enabled the patient to be more socially-adjusted and resume her education. However, the increased risk of bone mineral density loss in patients placed on DMPA for more than two years, impelled its replacement by another form of progestin, Levonorgestrel Intrauterine Device, as a long-term adjunct for seizure control.

This paper aims to present a case of Catamenial Epilepsy and discuss its pathophysiology, diagnosis, and management. It also aims to give a better understanding of the neuroactive properties of estrogen and progesterone and its role in the development of Catamenial Epilepsy. Psychosocial issues in the treatment of Epilepsy in the child-bearing years up to the menopause are also discussed.

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