

Figure 3: Computed Tomography Angiogram
- Showing posterior communicating artery
(PCOM) aneurysm

Discussion: A few cases of PCOM aneurysm have been reported in Nigeria including that by Obiudu et al.5 and Ogun et al.6 In pupil-involving ONP, there is a higher suspicion of compression because the pupillomotor fibers course along the superficial aspect of the oculomotor nerve.⁷ In their study, Ogun et al⁶ reported that 58.8% of all cases of ONP were pupil-involved, but aneurysm was noted in only 15.4% of cases. One of the major challenges faced in managing our patients was financial difficulty. The first patient could not afford a CTA and the second patient could not afford neuro-surgery. This is not surprising since the average cost of a CTA in Port Harcourt is about 140-160,000 naira (~\$250) and neurosurgical intervention costs about 4million naira (~\$7,000); the minimum wage in Nigeria is 30,000 naira. This major challenge negatively impacts patient management as it makes it difficult to quickly arrive at a definite diagnosis so that appropriate intervention could be instituted.

Conclusion: These cases highlight the challenges faced in making a definitive diagnosis and subsequent management of neuro-ophthalmic cases. The government can proactively ensure everyone has universal coverage for Health to improve patients' quality of life.

References

- Kim K, Noh SR, Kang MS, Jin KH. Clinical course and prognostic factors of acquired third, fourth, and sixth cranial nerve palsy in Korean Patients. Korean J Ophthalmol. 2018; 32(3): 221-227.
- Chaudhry NS, Brunozzi D, Shakur SF, Charbel FT, Alaraj A. Ruptured posterior cerebral artery aneurysm presenting with a

- contralateral cranial nerve 111 palsy: A case report. Surg Neurol Int. 2018; 9: 52
- Keane JR. Third nerve palsy: analysis of 1400 personally-examined inpatients. Can J Neurol Sci. 2010; 37(5):662-670.
- Fang C, Leavitt JA, Hodge DO, Holmes JM, Mohney BG, Chen JJ. Incidence and Etiologies of Acquired Third Nerve Palsy Using a Population-Based Method. JAMA Ophthalmol. 2017; 135(1): 23-28.
- Obiudu HC, Chuku A, Chukwukwe IO, Chude EO. Posterior communicating artery aneurysm in a 20-year-old boy presenting as non-isolated third nerve palsy. Niger Med J. 2009; 50 (3): 68-70.
- Ogun OA, Aremu OO, Ajaiyeoba AI. Ocular motor cranial nerve palsy as an indicator of neglected systemic disease in Nigeria: perspective from a Neuro-Ophthalmology Clinic. Neuro ophthalmology. 2019; 43(6): 355–362
- Joshi S, Tee WWH, Franconi C, Prentice D. Transient oculomotor nerve palsy due to non- aneurysmal neurovascular compression. J Clin Neurosci. 2017, 45:136-137.

A Case of Frequent Blinking and Abnormal Eyeball Movement Associated with Generalized Epilepsy

Adaora Okudo^{1,2}, Olufemi Babalola¹, Ifeyinwa Osheku³

¹Rachel Eye Center, Abuja, Nigeria

²Department of Ophthalmology, Asokoro District Hospital, Abuja,

³Department of Internal Medicine, Asokoro District, Hospital, Abuja, Nigeria

Corresponding author: Adaora Okudo,

Email: adaoraokudo@gmail.com

Introduction: Eyelid myoclonus is an idiopathic generalized epileptic syndrome that can occur with or without absence seizures. Eyelid Myoclonus with Absence (EMA) is also known as Jeavon's syndrome. The features include frequent blinking, an upward roll of the eyeballs, and slight backward movement of the head. It can be spontaneous or stimulated by light. Light and eyelid closure are triggers to the seizures.

Case Report: A 13-year-old young male student presented with a four-month history of frequent blinking and abnormal eye movements. There was a positive history of leg tapping while asleep which started a year prior to presentation, but there was no loss of consciousness.

On presentation, the patient was a young healthy looking myope who frequently blinks with sudden upward and left jerky movements of the eyeballs. Visual acuity was CF at 2 meters in both eyes improving with -4.50DS to 6/6. Intraocular pressures were 12 mmHg bilaterally. Anterior and posterior segment findings were normal. Brain MRI was normal, but EEG was

abnormal with features suggestive of generalized epilepsy.

He was co-managed with the neurologist and placed initially on Tabs Sodium valproate 250mg for 3 months. This was modified to Tabs Sodium Valproate (controlled release) 500mg at night since there was little change. This resulted in an appreciable reduction in blinking and abnormal eye movement. The leg tapping stopped at this dose. Repeat EEG while on 500mg still showed significant changes and his medications was reviewed to 750mg at night. He is currently on 1000mg at which the frequent blinking and abnormal eye movements sparingly occur.

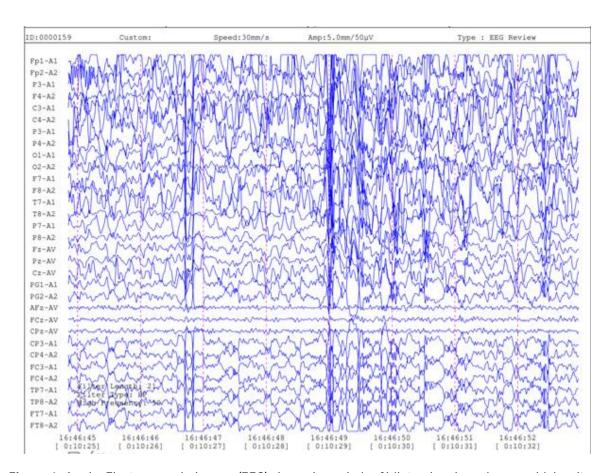


Figure 1: Awake Electroencephalogram (EEG) showed an admix of bilateral and synchronous high voltage brief (< 1 second) poly spike and sharp wave complex with **bi-frontotemporal dominance**

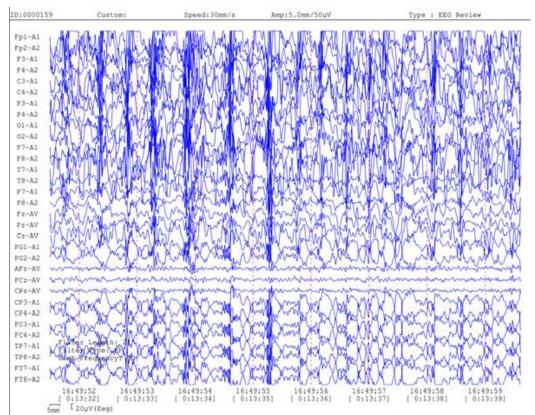


Figure 2: Hyperventilation and photic protocols revealed paroxysms of generalized spike-wave epileptic discharges with a conclusion of generalized epilepsy.

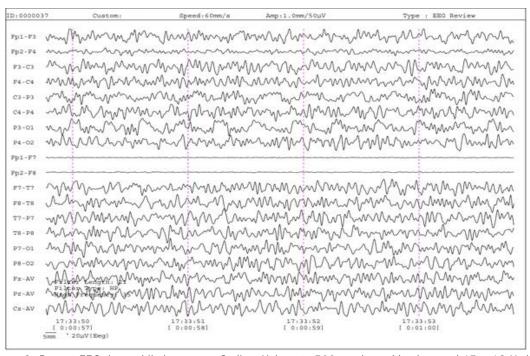


Figure 3: Repeat EEG done while he was on Sodium Valproate 500mg showed background 15 – 18 Hz beta activity with some 11- 14 Hz alpha waves; these are bilaterally synchronous but the response to eye-opening is not ascertained. Left-sided sharp and slow wave discharges, lasting about 1.5 seconds at P3-01 and C3-P3 channels.

Discussion: Eyelid myoclonus (EM) was recently included as a separate entity in the International League Classification of Epilepsy in 2017 as a form of a non-motor generalized seizures. EM is very rare and we did not come across any reported case in Nigeria and Africa at large. This could also be the reason why his mother was told he was malingering in the two eye hospitals she initially presented in.

The drug of choice for EM is Sodium Valporate 20-30mg /kg.² His weight was 40kg so the required dose is 1200mg daily. With a stepwise increase of his medications there was significant clinical improvement.

EM is usually misdiagnosed or missed early in the disease and usually picked up when patients develop a generalized tonic-clonic seizures which occurs usually at the age of 12 years.³ **Conclusion:** Eyelid myoclonus is a rare form of epilepsy. It is of utmost importance to create awareness of the disease among physicians. Early diagnosis and treatment are important prognostic factors of the disease.

References

- Yuan Y, Yang F, Huo L, et al. Case Report: A Case of Eyelid Myoclonic Status With Tonic-Clonic Seizure and Literature Review. Front Pediatr. 2021;9:671732. Published 2021 Apr 22. doi:10.3389/fped.2021.671732
- Covanis A, Gupta AK, Jeavons PM. Sodium valproate: monotherapy and polytherapy. Epilepsia. 1982;23(6):693-720. doi:10.1111/ j.1528-1157. 1982. tb05085.x
- 3. Betjemann JP, Lowenstein DH. Status epilepticus in adults. Lancet Neurol. (2015) 14:615–24. doi: 10.1016/S1474-4422(15)00042-3