Case Report
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Sunflower Syndrome - A Case Report

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Abstract

Sunflower Syndrome (Self-induced Photosensitive Epilepsy) is a rare epileptic disorder of childhood; characterized by stereotyped behavior; comprising of obsessively seeking out a light source, staring at the light source, and waving one hand in the front of their eye(s). It is a rare form of photosensitive epilepsy. The exact pathogenesis is unknown but the anatomical substrate of origin may be cingulate circuit. Sunflower syndrome is poorly characterized in medical literature and is often misdiagnosed in the neurology clinics. Identifying this specific syndrome is important for effective prevention by blue glasses and management with broad spectrum anti-epileptics medications. This is a single case report of a young boy; with electro-clinical data.

Keywords: Epilepsy, Photosensitive Epilepsy, Sunflower Syndrome

1. Introduction

Sunflower Syndrome (Self-induced Photosensitive Epilepsy) is a rare epileptic disorder characterized by stereotyped behavior; comprising of obsessively seeking out a light source, staring at the light source, and waving one hand in front of their eye(s)[1].

2. Case Presentation

A 5-year-old boy was brought by his grandmother, with history of repeatedly waving his hand in front of face in bright sunlight for last few months. He remained unresponsive during that event for 1 to 5 seconds and was repeatedly waving one of his hands in front of eyes, even after he was instructed to not to do so. He was born of non-consanguineous marriage, with no family history of any neurological disorder. His play-school performance was average. On examination, he was conscious, oriented and had no focal neurological abnormality.

His inter-ictal electroencephalogram (Figure 1) showed generalized spike and wave discharges with photosensitivity and normal background rhythm. His MRI Brain was unremarkable.

3. Discussion

Sunflower Syndrome is a rare form of photosensitive epilepsy. It is more common in boys than girls and average age of presentation is 3-10 Yrs. Various seizure types, like Absence seizures, myoclonic seizures and GTCs are seen as part of this syndrome[2]. Pathogenesis of this syndrome is unclear but electroencephalography and imaging study have suggested cingulate circuit to be the anatomical substrate. The few case reports of this syndrome were shown to have a favourable response to Sodium Valproate, Levetiracetam, Lamotrigine, Clonazepam or Clobazam[3]. Newer drug like Fenfluramine Hydrochloride is being tried in phase 3 study[4].

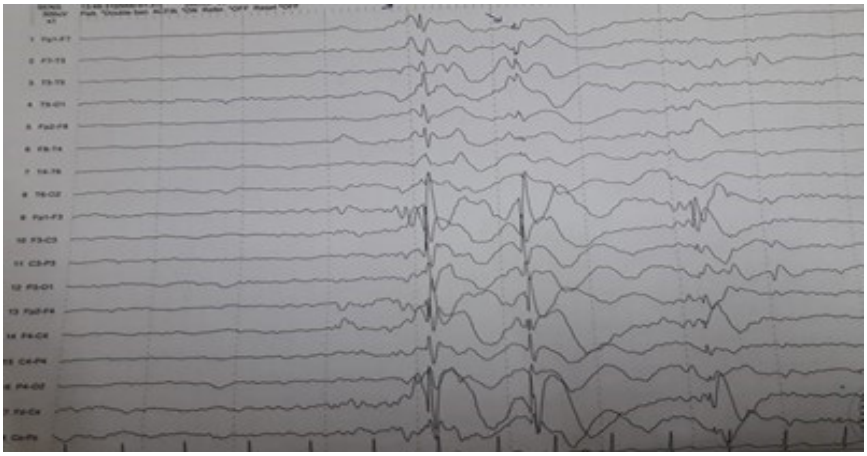

Figure 1. EEG

4. Conclusion

Sunflower syndrome is poorly characterized in medical literature and is often misdiagnosed at the clinical level. Identifying this specific syndrome is important for effective prevention by blue glasses and management with broad-spectrum anti-epileptics.

5. References

1. Bettoni L, Bortone E, Ghizzoni P, Juvarra G. The sunflower syndrome. Funct Neurol. Apr-Jun 1986; 1(2): 175–81. PMID: 3609852.
2. Ames FR. Self-induction" in photosensitive epilepsy. Brain. 1971; 94(4): 781–98. https://doi.org/10.1093/brain/94.4.781. PMID: 5132972.
3. Covanis A. Photosensitivity in idiopathic generalized epilepsies. Epilepsia. 2005; 46 Suppl 9: 67–72. https://doi.org/10.1111/j.1528-1167.2005.00315.x. PMID: 16302877.
4. An Open-Label Treatment of ZX008 (Fenfluramine Hydrochloride) in Pediatric and Adult Epilepsy Patients (Ages 4-25) With Sunflower Syndrome. https://ichgcp.net/clinical-trials-registry/NCT03790137.

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