

20th World Congress on

PEDIATRICS AND ADOLESCENT MEDICINE

20th World Congress on

&

PEDIATRIC ONCOLOGY AND NURSING

September 17-18, 2018 | Philadelphia, USA

Electro-clinical worsening in children treated with Carbamazepine/Oxcarbamazepine: Concern for use of Carbamazepine/Oxcarbamazepine as an initial antiepileptic drugs for focal epilepsy in children

Wankhede V, Pahuja K and Gajimwar V

Government Medical College and Hospital, India

Introduction: Carbamazepine (CBZ) and its derivative Oxcarbamazepine (OXC) are antiepileptic drugs (AEDs) effective in mainly focal and few generalized epilepsies. However, CBZ/OXC is not only known to exacerbate epileptic seizures in generalized epilepsies but also sometimes even in focal epilepsies and known to have EEG worsening as an adverse effect. A literature review describes several cases of seizure exacerbation and/or EEG worsening due to CBZ/OXC with a high incidence in children. We report 30 new cases of such worsening.

Methodology: Out of 262 children, who was put on CBZ/OXC, we retrospectively analyzed 30 patients who developed clinical and/or electrographic worsening after initiation of the drug. We noted detailed seizure profile, serial EEG tracings, cognitive functions or behavior before and after CBZ/OXC treatment and after withdrawal of CBZ/OXC. 27 patients had focal epilepsy and 3 had generalized epilepsy who presented initially with focal seizures. Clinically, seizure frequency increased in 14 patients (46.6%) and 12 (40%) had onset of new seizure types like isolated myoclonus in 5, isolated absences in 5 and GTC, atonia with myoclonus in 1, myoclonus with absences in 1 and in rest 4 (13.3%) deteriorating scholastic performance and/or appearance of behavioral issues were the sole indicators of worsening. Electrographically, deterioration was in the form CSWS pattern in 6 patients, 3 Hz SWD in 2 and increase in discharge frequency in rest 22. The cognitive/psychosocial issues were noted in 25 patients in the form of ADHD/hyperactivity/inattentiveness/aggressiveness. After discontinuation of CBZ/OXC and change of AED, reduction in seizure frequency, the disappearance of new seizure types, behavior improvement and improving scholastic performance was noted. EEG abnormalities reduced in 22 cases (73.33%) and disappeared in 8 patients (26.66%).

Conclusion: Children on CBZ/OXC must be followed up for clinical and psychosocial parameters. Increase in seizure frequency, the appearance of new seizure types or behavioral issues and progressive scholastic deterioration warrants timely EEG to look for possible worsening. However, this also raises concern for use of CBZ/OXC as an initial AED for focal epilepsy in children.

karanhp1000@gmail.com