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COMMENTARY LETTER

Oral ondansetron treatment induced extrapyramidal reaction in children

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Sirs,

A seven-month-old male child presented to us with complaints of vomiting and loose motions since one day. Patient was passing loose stools without blood or mucus. There was no history of fever or bottle-feeding. On examination, the vital parameters were stable and there was no evidence of dehydration. A diagnosis of acute gastroenteritis of viral origin, with no dehydration was made. The patient was advised oral rehydration solution with home available fluids and Syp. Ondansetron was prescribed in a dose of 2 mg as symptomatic treatment for vomiting. After giving the first dose of ondansetron, the patient was immediately rushed back to the hospital with complaints of abnormal posturing of the head and neck. On examination, the vital parameters were normal and dystonic posturing of the head and neck were observed which subsided with injection promethazine in a dose of 0.1 mg/kg. Patient was kept under observation for two hours and in the absence of similar episodes was discharged. The dose of ondansetron administered by the mother was as advised. There was no history of drug induced dystonic reactions in the past.

Ondansetron is considered a relatively safe anti-emetic. It is considered the gold standard in the treatment of nausea and vomiting associated with cancer chemotherapy [1]. It is

also used in post-operative anesthesia or in patients with acute gastroenteritis [2]. Routine side effects of ondansetron include headache, constipation and dizziness [3]. Asymptomatic electrocardiogram changes like prolongation of PT, long QTc and arrhythmias are also seen [3]. Rarely extra-pyramidal reactions (EPRs), multifocal encephalopathy and anaphylaxis have also been reported [4-7].

Though EPRs have been reported in the past, these cases are mostly in cancer related chemotherapy patients, in adults and in patients with history of drug induced dystonic

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reactions [2,4,7]. There are no reports of EPRs in infancy to the best of our knowledge though; there is a report in a 36 week old neonate after maternal ingestion of ondansetron. This was when ondansetron was used along with a selective serotonin inhibitor, citalopram, thus leading to a possibility of interaction between the two drugs [8].

Our patient was an infant and developed EPRs after oral administration of the drug which makes this case unusual. All reported cases of EPRs are after intravenous use, repeated doses and use of a higher dose of the drug. We therefore stress the need to use ondansetron judiciously especially in the pediatric population as some of the side effects like EPRs may cause anxiety and others like anaphylaxis may be life threatening if treatment facility is not promptly available.

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