Ondansetron as the first approach in the management of the patients with acute gastroenteritis visiting the pediatric emergency department: A single-center experience

To the Editor,

It has been recently shown that a single oral dose of ondansetron, given before starting oral rehydration therapy (ORT), in children aged 3 months to 5 years with diarrhea and vomiting resulted in better oral rehydration without significant adverse events (1). We retrospectively evaluated ondansetron use in our pediatric emergency department between May and June 2015. We treated 119 patients aged 1 to 14 years with suspected acute gastroenteritis having uncontrolled vomiting. We administered a single dose of ondansetron (0.20 mg/kg) through intravenous route if the patients needed intravenous liquids or intramuscular route only if ORT was needed. Thirty minutes after the drug administration, all the patients started ORT according to current guidelines (2). In addition to ORT, because of moderate to severe dehydration, seventy-four patients were submitted to a short course of intravenous 0.9% NaCl administration (20 mL/kg in 2 hours), which was eventually repeated during the following 2 hours. One hundred out of 119 patients (84%) were discharged after an observation of 4 to 6 hours. After 6 hours of observation, 19/119 patients (16%) were admitted because of persistent vomiting; of these, in 16 patients, the diagnosis of acute gastroenteritis was confirmed, and in 3 patients, acute appendicitis, pancreatitis, and pneumonia were diagnosed. Among the 100 discharged patients, 8 returned for reappearance of vomiting and were admitted with subsequent confirmation of acute gastroenteritis. No significant side effects were detected; only one patient presented a rapidly resolving urticarial rash. The ondansetron use did not mask a possible different diagnosis from that of acute gastroenteritis. Our data further support the safety and efficacy of the ondansetron as first approach in the management of acute gastroenteritis despite the doubts about its safety, as previously expressed in the literature (3,4).

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