

Title:

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Hiatal hernia and Cameron ulcer: an overlooked association in pediatric patients

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Dear Editor,

A ten-years-old boy presented with a two-year history of iron deficiency anaemia (IDA) and occasional vomiting. His medical history was significant for cerebral palsy and chronic pulmonary disease under mechanical cough assistance and nocturnal non-invasive ventilation. He was already treated with proton pump inhibitor (omeprazole 20mg per day) and iron supplement because of a previous diagnosis of gastroesophageal reflux disease (GERD). Esophagogastroduodenoscopy revealed a sliding hiatal hernia and an 8mm ulcer with a clean base involving the diaphragmatic hiatus, at the lesser curvature level, consistent with Cameron ulcer. During the exam, it was possible to see the proximal stomach moving up and down through the diaphragmatic hiatus, with active oozing bleeding from the ulcer. A laparoscopic herniorrhaphy and fundoplication were performed. At 6-month follow-up, vomiting and IDA had totally resolved. Unfortunately, the patient died one year later because of

acute respiratory insufficiency.

Cameron lesions and hiatal hernias are uncommonly reported in adults evaluated for gastrointestinal bleeding. Its prevalence ranges from 0.6% to 5%¹, whereas in children they are only few case reports. Besides a poorly understood pathogenesis, it can be attributed to mechanical trauma to the hiatal hernia caused by respiration-related diaphragmatic movements and acid injury²⁻⁴. We hypothesize that in our patient, the pressure difference between the abdomen and thorax generated by the ventilatory support, not only aggravated GERD, but also contributed to the exacerbation of the hernia's sliding movement and distress of the mucosa ultimately leading to ulceration. Pseudobulbar palsy with impaired airway clearance and lung function were the main causes of his unfavorable outcome.

Although a rare occurrence and cause of acute or chronic gastrointestinal bleeding⁵, a hiatal hernia in a child with IDA should raise the suspicion for Cameron lesions. First-line treatment is long-term acid suppression and iron supplement. Surgery is recommended for patients whose lesions are refractory to medical treatment.

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