



Splenic flexure volvulus in adult patient with cerebral palsy

Authors: Mihaela Benčić, MD¹, Andro Kurtić, MD¹, Maša Sorić, MD, PHD ¹(mentor)

¹ Emergency Department, University Hospital Dubrava, Zagreb, Croatia

Background:

Colonic volvulus is a clinical entity characterized by abnormal torsion of the large bowel intestine loop around the axis of its mesentery leading to bowel obstruction. Colonic volvulus constitutes only 15% of all large bowel obstructions, with the sigmoid colon and cecum as the most commonly affected sites. On the contrary, splenic flexure volvulus (SFV) represents the rarest subtype of all colonic volvulus that cause less than 1% of all of them. To date, only a few cases of SFV have been reported in the literature, of which very few are in adult patients with cerebral palsy.

Case presentation:

A 42-year-old female with a previous history of cerebral palsy, mental retardation, epilepsy, and tetraplegia presented to the emergency department with complaints of abdominal pain and vomiting that had been going on for a day. There was also a history of chronic constipation, laxative use, psychotropic drugs, and no previous abdominal surgeries. Her vital signs were within normal limits. Physical examination revealed a distended and tympanic abdomen with mild generalized tenderness but without signs of peritoneal irritation. Laboratory tests showed mild leukocytosis ($12.5 \times 10^9/L$) and neutrophilia ($10.8 \times 10^9/L$). An abdominal plain X-ray film demonstrated distension of the cecum and ascending colon. Computed tomography revealed mesentery torsion with a whirl sign in the splenic flexure area leading to a diagnosis of SFV. The patient underwent an emergency decompressive colonoscopy with successful devolvulation of the colon and complete regression of symptoms.

Conclusion:

Splenic flexure volvulus is an extremely rare cause of intestinal obstruction with possible severe complications. This case report shows that SFV, despite its infrequency, should be considered a possible cause of acute abdomen in patients with cerebral palsy due to irregular bowel habits, immobility, and drugs.

Keywords:

Cerebral palsy, intestinal obstruction, splenic flexure volvulus