Revista Española de Enfermedades Digestivas
The Spanish Journal of Gastroenterology

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DOI: 10.17235/reed.2025.11401/2025
Link: PubMed (Epub ahead of print)

Please cite this article as:
Ni Yanjing, Li Guize, Wang Xuemei, Zheng Xiaoning , Li Jun. Neurogenic megacolon in an adult presenting with acute intestinal obstruction. Rev Esp Enferm Dig 2025. doi: 10.17235/reed.2025.11401/2025.

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Neurogenic megacolon in an adult presenting with acute intestinal obstruction

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Keywords: Neurogenic megacolon. Adult. Intestinal obstruction.

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Dear Editor,

A 72-year-old man presented with a 1-week history of abdominal distension and cessation of defecation. He had undergone craniotomy for a cerebral aneurysm 10 years ago, with subsequent CT scans showing extensive damage to the corresponding brain tissue. Physical examination revealed severe abdominal distension without rebound tenderness. Initial CT showed marked colonic dilation with fecal retention, suggestive of megacolon (Figure 1). Conservative management with enemas and fasting failed, prompting a subtotal colectomy with colostomy under general anesthesia. Histopathology revealed chronic mucosal inflammation, muscular atrophy, and neuronal degeneration, confirming neurogenic megacolon. On the third postoperative day, he developed pulmonary embolism (confirmed by CTA), managed with low-molecular-weight heparin. One month postoperatively, he developed nutritional edema. Nutritional support therapy, including intravenous fat emulsion, amino acids, and vitamins was administered, resulting in gradual resolution of the edema.

Discussion:

Neurogenic megacolon is a common complication among spinal cord injury patients, notably in the elderly and individuals whose injuries occurred more than a decade prior (1, 2). The association between brain injury and colonic dysfunction has been reported (3). Post-operative complications following brain aneurysm surgery can also include the development of megacolon (4).

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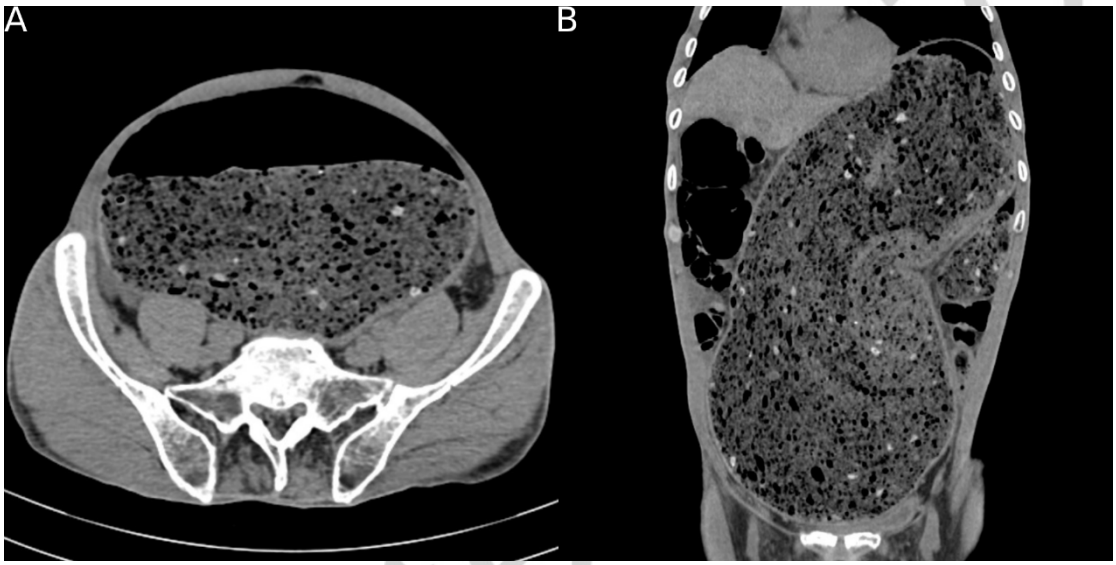

Figure 1. (A) Axial abdominal CT and (B) coronal abdominal CT depicting massive dilatation of the colon of up to 20 cm with significant retained material.