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IMAGES IN EMERGENCY MEDICINE

Gastrointestinal

Postrenal acute kidney injury

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1 | PATIENT PRESENTATION

A 64-year-old man presented with chronic constipation (CC) and progressive abdominal pain for 1 month. He sought the emergency department due to generalized edema, asthenia, altered level of consciousness, and decreased urinary output that began 1 week ago. Admission examinations showed moderate normocytic anemia, creatinine 7.42 mg/dL, urea 232 mg/dL, blood urea nitrogen (BUN) 18.01 mmol/L, normal electrolytes, and severe metabolic acidosis (MA). Hemodialysis was performed due to uremia and refractory MA. Abdominal computed tomography (CT) revealed a severe colonic distention from giant fecaloma (GF) occupying the rectosigmoid region, compressing and displacing the bladder anteriorly, associated with dilation of the pyelocaliceal system bilaterally due to compression in the distal thirds of the two ureters by the GF (Figures 1–3).

2 | DIAGNOSIS: GIANT FECALOMA-RELATED HYDRONEPHROSIS

Acute obstructive nephropathy (AON) with compression by GFs owing to CC is rarely reported,¹ but can cause potentially fatal acute pyelonephritis or emphysematous pyelonephritis.² The bowel dilatation of the rectosigmoid colon leads to extrinsic ureteral compression and acute urinary tract obstruction owing to anterior displacement of the bladder base.³

Fecal impaction should be considered in the differential diagnosis of an AON, especially in elderly people with CC, history of cerebrovascular accidents, or spinal cord injury, use of agents that decrease bowel movements such as analgesics, and conditions such as Hirschsprung's disease and Chagas' disease.^{4,5} Despite clinical treatment, CC-



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FIGURE 1 Sagittal computed tomography reconstruction demonstrates giant fecaloma and colonic dilatation (white arrowhead).

induced GF may need a surgical procedure to treat complications such as intestinal obstruction, volvulus, colonic ulceration, stercoral

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FIGURE 2 Coronal computed tomography reconstruction demonstrates colonic dilatation and giant fecaloma (white arrowhead) compressing and displacing the bladder (white asterisk).



FIGURE 3 Axial computed tomography reconstruction discovers bilateral pyelocaliceal dilatation (white asterisk) due to compression in the distal thirds of the two ureters by giant fecaloma and colonic dilatation (white arrowhead).

perforation, AON, and rupture of the colon or bladder.^{6,7} Our patient required Hartmann's procedure, but due to multiple complications, he died 6 days after surgery.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

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