

# Fecal impaction as the first manifestation of Addisonian crisis

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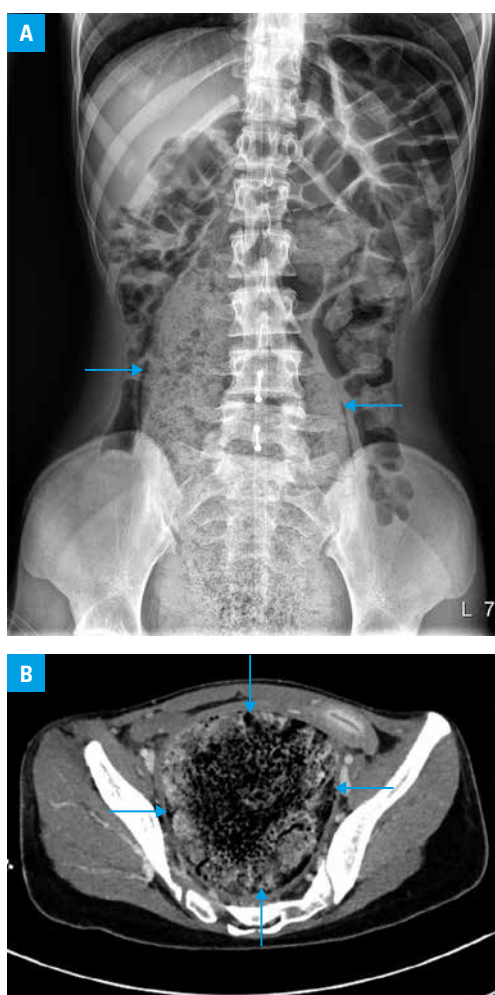
A 19-year-old woman was admitted to our general surgery department due to vomiting, abdominal pain, weakness, and dizziness. On admission, she was dehydrated and hypotonic, with low blood pressure (80/50 mmHg). Blood test results showed hyponatremia and hyperkalemia. The patient reported a loss of 5 kg of weight in 3 months and frequent infections (about 1 per month).

An abdominal examination revealed slow peristalsis and general abdominal pain without peritoneal signs. On per rectum examination, a large amount of fecal masses was palpable. An abdominal radiograph (FIGURE 1A) showed an expanded rectum with fecal masses (arrows). Computed tomography (FIGURE 1B) of the abdomen confirmed an expanded rectum (diameter, 10 cm), with voluminous fecal impaction without signs of perforation or other abnormalities.

Laxative treatment was insufficient, and the patient was subjected to manual evacuation of the fecal masses under general anesthesia. During the procedure, 10 kg of stool were evacuated from the patient's rectum. Despite sufficient fluid intake, blood pressure values remained low on the first postoperative day, and blood test results showed hyperkalemia (6 mmol/l) with profound hyponatremia (116 mmol/l). Additional biochemical tests showed hypocortisolemia (1.12 µg/dl; reference range, 7–28 µg/dl) and high levels of adrenocorticotropic hormone (886 pg/ml; reference range, 5–27 pg/ml). After a consultation with an endocrinologist, the patient received a pharmacological treatment with hydrocortisone and fludrocortisone, which resulted in significant clinical improvement. Subsequently, due to a suspicion of adrenal crisis, the patient was transferred to a department of endocrinology for further clinical management. Detailed hormonal and immunological tests confirmed Addison disease.

Although primary adrenal insufficiency often results in abdominal pain, nausea, and vomiting, to our knowledge fecal impaction has not been described before. Indeed, there are only 3 case reports describing bowel obstruction in patients with adrenal insufficiency.<sup>1–3</sup> Fecal impaction is a common condition that has numerous possible causes and is associated with high morbidity.<sup>4</sup> The present case highlights the need to consider Addison disease in the course of bowel obstruction due to fecal masses.

**FIGURE 1** **A** – an abdominal radiograph demonstrating an expanded rectum with fecal masses (arrows); **B** – computed tomography scan demonstrating an expanded rectum (diameter, 10 cm) with voluminous fecal impaction (arrows)



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