

Title:

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McKittrick-Wheelock syndrome: rectal villous adenoma as a cause of acute renal

failure

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syndrome.

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Dear Editor,

We report the case of a 67-year-old male with a history of arterial hypertension and

atrial fibrillation, who was admitted for acute renal failure (creatinine: 4.41 mg/dl) and

hypotension. He also presented hyponatremia (129 mmol/L) and hypokalemia (2.7

mmol/L). The patient referred profuse diarrhea during the previous two months as a

possible triggering cause. Physical examination showed signs of dehydration and

palpation of a polypoid mass in the rectal ampulla. Colonoscopy revealed a villous

lesion (LST-G Is-IIa, Paris classification) extending from the anal margin, involving the

entire circumference, to about 15 cm away of the anal margin, which was unresectable



endoscopically (Fig. 1). The histopathological analysis of the biopsies was compatible with villous adenoma with areas of severe dysplasia. An abdominoperineal resection was performed, and the surgical specimen was reported as well-differentiated adenocarcinoma of the rectum on a villous lesion that did not affect the muscularis propria, and with no lymph node involvement. In a subsequent review the patient was asymptomatic, with normalization of laboratory parameters.

DISCUSSION

McKittrick-Wheelock syndrome (1) is defined as hypersecretory diarrhea with hydroelectrolyte depletion associated with villous adenoma of the rectum. Hypersecretion is thought to be produced by overexpression of prostaglandin E2 in this type of lesion (2). Cases can be very severe and lead to hypovolemic shock, so first-line treatment involves hydroelectrolytic and acid-base balance correction (3). Treatment with indomethacin or somatostatin may be considered to decrease hypersecretion. It is also worth mentioning that this syndrome is highly associated with invasive cancer, with adenoma size and extension being the main risk factors. Thus, resection of the lesion is considered the definitive treatment (4).

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Fig. 1. Endoscopic images in front view and retroflexion.