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Case Report

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Ileal Conduit Necrosis Secondary to Spontaneous Retroperitoneal Hematoma

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ABSTRACT

Case Presentation: A fifty-nine years old woman with previous muscle-invasive bladder cancer treated five years prior in another medical center with radical cystectomy and Bricker's ureteroileostomy diversion, presented to the Emergency Room (ER) describing general discomfort, diarrhea, arterial hypotension and tachycardia. After conducting an imaging test, ileal conduit ischemia and mesenteric ischemia was diagnosed secondary to retroperitoneal hematoma. Ileal reservoir resection, resection of the ischemic intestine, and bilateral cutaneous ureterostomy were performed.

Relevance: In patients with previous urinary diversion and acute abdominal pain, it is imperative to dismiss conduit involvement.

Clinical Implications: In cases of acute abdomen with history of urinary diversion, physical examination and imaging tests can detect if the ileal reservoir has been compromised and, therefore, guide the adequate therapeutic approach.

Conclusions: Identifying the complications of the urinary diversion in early stages in order to treat the underlying cause is advisable.

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Background

The biggest morbimortality issue that patients with radical cystectomy and ileal conduit as urinary diversion have is related to the intestinal anastomosis and the stoma. Stomal early complications are usually secondary to vascular deficiency, therefore it is crucial to examine the mesenteric irrigation prior to the diversion construction and the viability of anastomotic edges. The most common immediate post operative complications are intestinal necrosis, hemorrhage, dermatitis, hernia, stenosis, stoma obstruction and retraction [1,2].

When a clinical case of urostomy necrosis is presented an early diagnosis of intestinal ischemia should be made with the use of an arteriography or abdominopelvic CT scan with intravenous contrast administration that may facilitate the delimitation of necrosis extension and plan urgent surgery for the segment resection. In hospitalized patients, during the immediate post operative time, physical examination, blood tests and imaging tests make the diagnosis a lot easier [1-3]. Nevertheless, in a patient with urinary diversion that presents to the ER with acute abdominal pain, the diagnosis can be delayed for its unusual occurrence [4].

Case Report

A fifty-nine years old woman presented to the ER with diarrhea and general discomfort of many days, normal body temperature, arterial hypotension and tachycardia.

Her medical records registered Amyotrophic Lateral Sclerosis (ALS) being treated with fingolimod, and muscle-invasive bladder cancer treated in another medical center with radical cystectomy and urinary diversion with ileal conduit five years prior. The patient did not take any other medication.

During the physical examination, abdominal distension was found with peritoneal irritation signs and color change of the stoma which altogether suggest ischemia.

The blood tests showed renal function deterioration (creatinine: 1.65 mg/dL; glomerular filtration rate: 34) and elevated acute phase reactants (CRP: 112mg/L; leucocytes: 27000; lactate: 14.9g/dL).

She was hospitalized in the ICU for multiorgan failure reversion and study of the subjacent cause. An abdominopelvic CT scan with IV contrast was performed and showed ileal conduit and small bowel hypodensity (Fig. 1,2), also a hematoma in the mesenteric root that could be the cause of the hypoperfusion by compressive mechanism (Fig. 3).

A contrast-enhanced ultrasound was also performed to confirm the indirect signs of intestinal ischemia and that the mesenteric collection was compatible with a hematoma given its hypoechogenicity and absence of heterogeneous content (Fig.4).

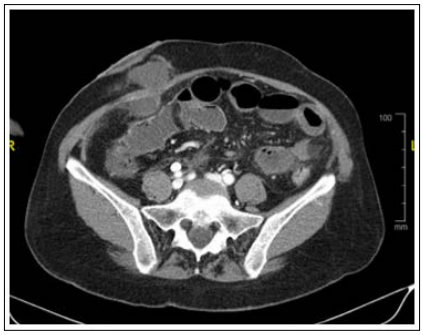

Figure 1: Abdominopelvic CT scan with IV contrast. Ileal conduit hypodensity

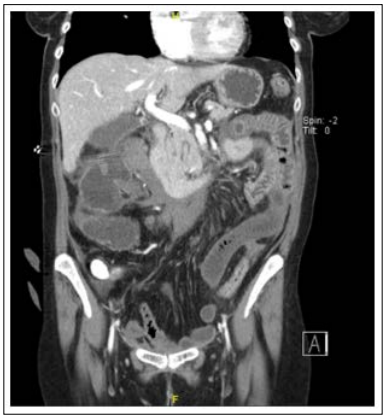

Figure 2: Abdominopelvic CT scan with IV contrast. Small bowel hypodensity

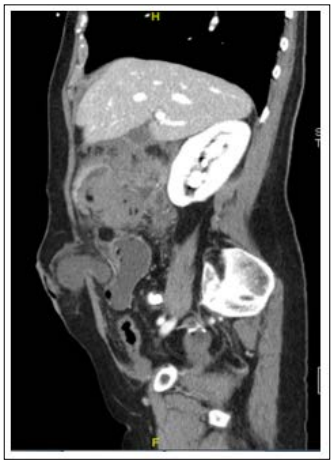

Figure 3: Abdominopelvic CT scan with IV contrast. Mesenteric root hematoma

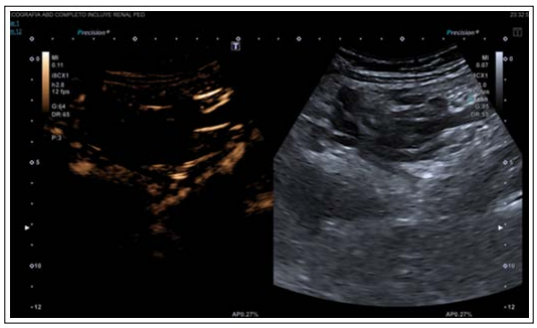

Figure 4: Contrast-enhanced ultrasound. Mesenteric collection with hematoma: hypoechogenic and absence of heterogenous content

Urgent exploratory laparotomy was performed finding a moderate amount of hemoperitoneum, a retroperitoneal hematoma compressing the mesenteric root with secondary hypoperfusion, 15cms of ileal conduit necrosis and 80cms of small bowel necrosis corresponding to the previous ileo-ileal mechanical anastomosis section used for the urinary diversion.

Ileal conduit was resected, because of short ureteral length and small bowel affection, a bilateral cutaneous ureterostomy was performed, as well as ischemic bowel resection and a loop ileostomy. Anatomopathological study of the resected ileal conduit reported ulcer-hemorrhagic ischemic enteritis. Patient had a torpid postoperative time period with dehydration secondary to hyperfunction of the ileostomy, S. epidermidis infectious endocarditis and multiple urinary tract infections that prolonged the hospitalization.

Discussion and Conclusions

This case report describes an acute intestinal ischemia secondary to a spontaneous retroperitoneal hematoma and shows the importance of a detailed clinical assessment including past medical and surgical history as well as current treatment for an early diagnosis.

In the examination of an acute abdomen on an unstable patient, the CT scan is the ideal imaging test to perform, given the capacity to identify the cause of the symptoms referred. In this specific case, it showed a mesenteric root hematoma as responsible for the ischemic enteritis [5].

Retroperitoneal hematomas are usually related to traumatic accidents or invasive procedures. There are spontaneous retroperitoneal hematomas (SRH) reported to be associated to arterial hypertension, anticoagulation, hemodialysis or vasculopathy [4-7]. In these cases, it is important to make a differential diagnosis that includes this alternative given the variety of symptoms presented. In our specific case, patient did not have any of these diagnoses registered in her past medical history.

The treatment of SRH should be decided depending on the patient's stability and the possibility of an interventionist radiology approach. In cases of stable patients, an expectative approach is also accepted (antibiotics administration, blood transfusion and clinical follow-up). Otherwise, in unstable patients, endovascular treatment is recommended. Finally, in patients with organs compromised secondary to the hematoma, open surgery is the election choice. In our case, with a settle intestinal ischemia, open surgery was our best choice [4-7].

References

1. Wein Alan J, Mezzano Gustavo, Campbell Meredith Fairfax, Walsh Patrick C (2015) Urología [de] Campbell-Walsh. México, D.F.: Médica Panamericana.
2. Farnham S, Cookson M (2004) Surgical complications of urinary diversion. World Journal of Urology 22: 157-167.
3. Landmann R, Cashman A (2021) Ileostomy or colostomy care and complications https://www.uptodate.com/contents/ileostomy-or-colostomy-care-and-complications/print
4. Sunga KL, Bellolio MF, Gilmore RM, Cabrera D (2012) Spontaneous retroperitoneal hematoma: Etiology, characteristics, management, and outcome. Journal of Emergency Medicine 43: e157-e161.
5. Carreras Aja M, Arrieta Artieda I, Borruel Nacenta S (2011) La tomografía computarizada multidetector en el abdomen agudo. Radiología 53: 60-69.

6. Chan Y, Morales J, Reidy J, Taylor P (2007) Management of spontaneous and iatrogenic retroperitoneal haemorrhage: conservative management, endovascular intervention or open surgery? International Journal of Clinical Practice 62: 1604-1613.

7. Dabney A, Bastani B (2001) Enoxaparin-associated severe retroperitoneal bleeding and abdominal compartment syndrome: a report of two cases. Intensive Care Medicine 27: 1954-1957.