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RESEARCH ARTICLE

AN UNUSUAL CAUSE OF SMALL BOWEL OBSTRUCTION: INTERNAL SUPRAVESICAL HERNIA

Khalid Rabbani, Tariq Ahbala, Wafae Ait Belaid, Habib Lammat and Abdelouahed Louzi
General Surgery, Mohammed VI University Hospital Center of Marrakech, Morocco.

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Abstract

Supravesical hernias are very rarely seen and reported as a possible cause of small bowel obstruction. The proper diagnosis of which is usually made intra-operatively as the preliminary diagnosis despite the availability of advanced radiological investigations which are not very helpful. We report the case of a patient without previous abdominal surgery with an acute abdominal obstruction in which laparotomy exploration revealed a strangulatedinternalsupravesicalhernia. The defect was repaired after reducing the bowel and the patient made an uneventful recovery.

Introduction:-

First described in 1804 by Sir Astley Cooper [1], supravesicalinternalherniaisunusual and little reported in the literature [1-10]. Often revealed by a complication, the internalsupravesicalhernia poses a diagnostic problem for simple cases. It is very often discovered during an occlusive syndrome. We report the observation of the management of a patient with an internalsupravesicalherniarevealed by an acute intestinal obstruction.

Patient And Observation:-

A 72-year-old man with no relevant medical history was admitted with a four-day history of small bowel obstruction characterized by abdominal pain and vomiting. On examination, the patient was found in good general condition with a pulse rate of 85/ min, a blood pressure of 130/70 mmHg, and a temperature of 37.6°C. Physical examination showed that the patient had abdominal distension without any peritoneal signs. Rectal examination was normal. Serum laboratory data were normal except for a white blood cell count of 13,600/ml and C-reactiveprotein: 93mg/L .

An abdominal X-ray revealed air fluid levels in distended loops of small intestine (Figure 1). Images on abdominal computerized tomography (CT) were consistent with a mechanical bowel obstruction due to an internal pelvic hernia (Figure 2).

Corresponding Author:- Khalid Rabbani
Address:- General Surgery, Mohammed VI University Hospital Center of Marrakech,Morocco.

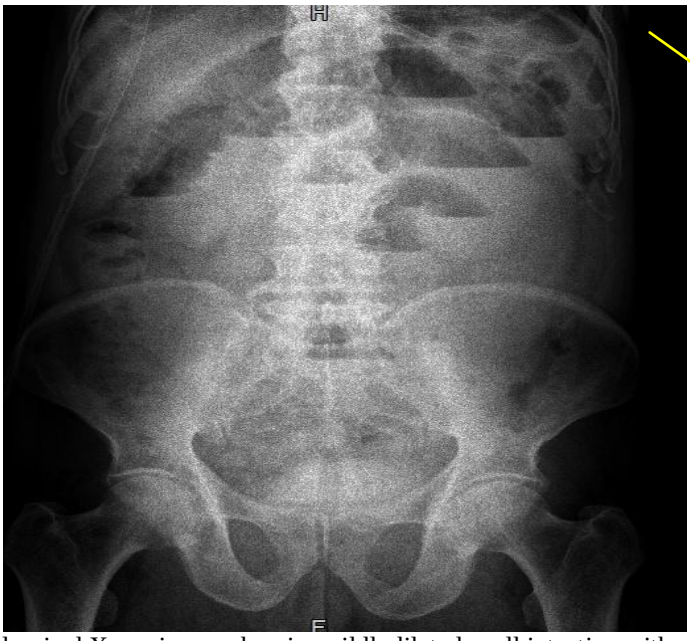

Figure 1:-Preoperative abdominal X-ray image showingmildlydilatedsmall intestine with niveau formation.

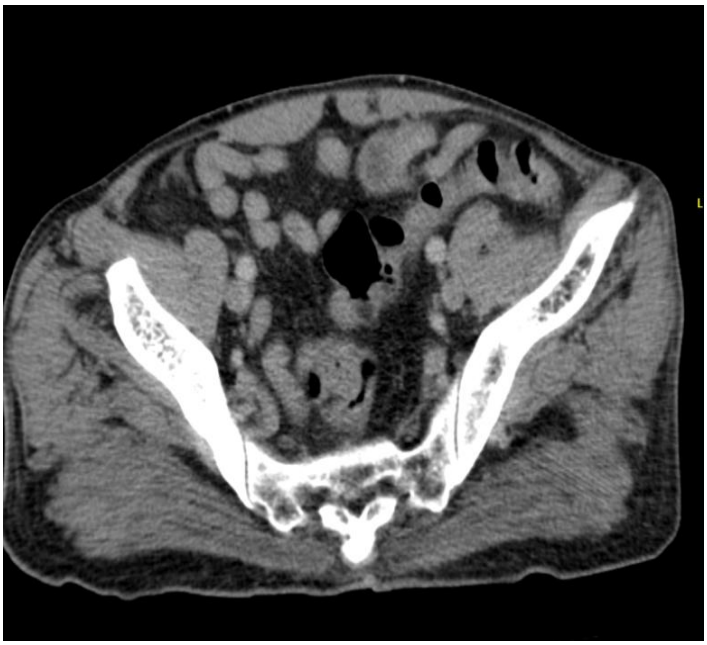

Figure 2:-A computedtomography scan showing a distendedloopwithtransitional zone.

The patient was resuscitated and taken to operating room for exploration via a midline laparotomy. The exploration showed a distended small intestine proximal to a loop of incarcerated loop of ileum that was herniated through an abnormal opening in the parietal peritoneum of the pelvis resulting in a left lateral supra-vesical hernia (Figure 3). The bowel was congested and edematous but still viable on reduction from the hernia sac. (Figure 3) And The neck of the hernia orifice measured 3 cm in its longest axis (Figure 3)

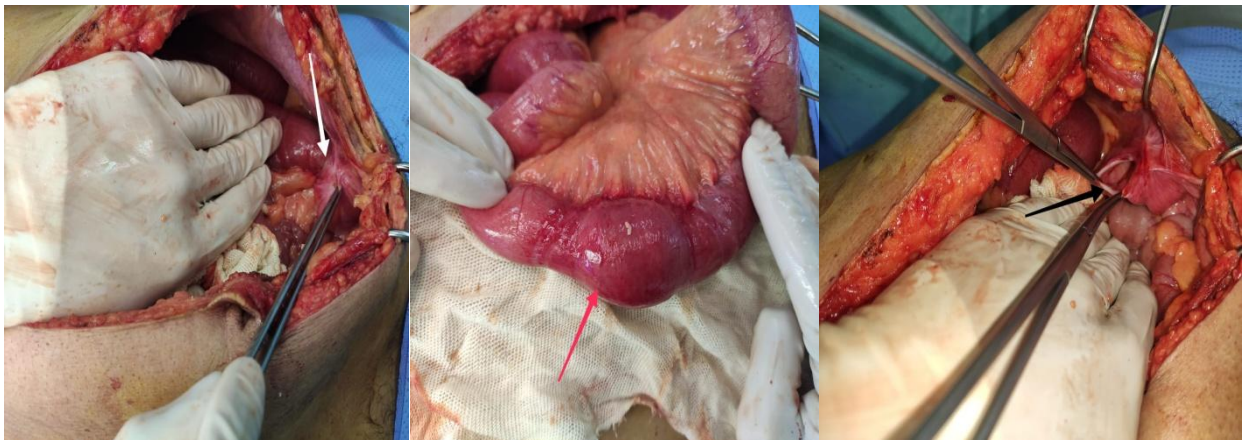

Figure 3:- Incarceration of a small intestinal loop in an abnormal orifice of the pelvicparietalperitoneum(white arrow), Loop of incarcerated terminal ileum (redarrow), Hernia orifice at the level of the supra-vesicalfossa(black arrow).

Partial resection of the hernial sac and simple closurewith 2/0 vicryl in separate points wereperformed.The patient recovered uneventfully.

Discussion:-

The supravesicalfossais the abdominal wall area between the remnants of the urachus (medianumbilical ligament) and the left or right umbilicalartery (medialumbilicallig- ament) [1,2]. The remnant of the urachusdividesinto the right and leftfossa. There are twovariants of supravesicalhernias : an externalformcaused by the laxity of the vesicalpreperitoneal tissue, and an internal one with a growinghernia sac from back to front and above the bladder in a sagittal paramedian direction [1,3].

Internalherniasrepresentonly 0.5 to 1% of all causes of bowel obstruction. Supravesicalinternalherniais a rare form of internalhernia and its incidence remainsdifficult to assess [1- 7]. It preferentially affects men over 50 yearsold [4, 5]. The fortuitouspreoperativediagnosis, canbeexceptionallyevoked in front of scannographicsigns [2,6,9]. In our observation, as for manyauthors [1, 2, 4, 5, 10], the diagnosis of acute bowel obstruction waseasy, however the supravesicalherniawas an intraoperativefinding. Even if the preoperativediagnosisremainsunusual, someauthorshadreported cases alreadyevoked by abdominal computedtomographybeforesurgery [1, 6, 9]. Simple suturing of the hernial sac issufficient for someauthors and helpspreventrecurrence [1,3]. In our case, weperformed a resection of the excessbag and a closure in separate points. The supravesicalinternalhernia has a good prognosis [1] and itdependsabove all on the earlydiagnosis and management of the intestinal obstruction. Someauthorshadperformedbowelresectionbecause of the necrosis [3,9].

Conclusion:-

Internalparavesicalherniaalthoughextremely rare shouldform part of the differential diagnosis in the patient presenting with small bowel obstruction especially in the previously unscarred abdomen. If the obstruction is complete then prompt exploration via laparotomy or laparoscopy is required. Delays in definitive management may result in marginally viable bowel becoming ischemic and requiring bowel resection.

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