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Acute pancreatitis revealed by right orchi - Epididymitis: A case report and review of the literature

Youssef Kouiss *, Tarik Aider, Mohammed Irzi, Anouar El moudane, Ali Barki

Department of Urology, Mohamed VI University Hospital, Oujda, Morocco

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ABSTRACT

Orchiepididymitis is a rare complication of acute pancreatitis and leads to misdiagnosis and unnecessary surgery. Abdominal pelvic CT and testicular Doppler ultrasound are the two key examinations in this situation.

This is about a 38-year-old patient, seen in the emergency room in an initial picture of right orchiepididymitis secondary to a migration of pancreatic fluid collection treated with antibiotic therapy with monitoring.

No consensus as to management has not been established so far.

- According to the 2012 Atlanta Consensus: basic antibiotic therapy is recommended in case of suspected infection of these collections.

1. Introduction

The extension of original pancreatic fluid collections to the scrotal level is a rare complication of acute pancreatitis. This particular situation can lead to diagnostic errors and unnecessary surgeries. Fluid from the peripancreatic region can migrate to distant sites, including the scrotal cavity, by crossing the fascial planes[1] No consensus on management has been established so far. Here, we discuss the case of scrotal swellings in patients with acute severe pancreatitis.

2. Case report

2.1. Patient history

38-year-old patient, admitted to the emergency room for right testicular pain not relieved by analgesics. With medical history of: cardiac decompensation due to atrial fibrillation, he was put under - bisoprolol 5mg: 1 tablet in the morning and ½ tablet in the evening, xarelto 20mg: 1 tablet/day. He subsequently underwent atrial fibrillation ablation. He is also known to have chronic exogenosis. Surgical history includes a right inguinal hernia repair.

2.2. Clinical and biological data

When he arrived at the emergency room, an ultrasound was performed suggesting orchi-epididymitis (Fig. 1). He was prescribed an antibiotic (ciprofloxacin per os) and underwent a complementary assessment by CT scan. On the CT scan, inflammatory infiltration and fluid collection were observed beginning under the liver and extending along the right parieto-colic gutter to the right intra-scrotal area. Hospitalization was initiated for monitoring. The diagnosis of pancreatitis was not initially considered. The clinical examination upon admission revealed a non-depressible, painful abdomen in the right hypochondrium, right flank, and right iliac fossa, along with a painful right large bursa exhibiting inflammatory signs. The remainder of the clinical examination was unremarkable. The laboratory findings indicated hyponatremia (128 mmol/l), hypocalcemia (1.98 mmol/l), elevated total bilirubin (63.5 µmol/l) and conjugated bilirubin (36.8 µmol/l), hepatic cytolysis with elevated ASAT levels (129 iu/l, >3x normal) and ALAT levels (103 iu/l, >2x normal), markedly elevated gammaGT levels (2077 iu/l), and notably increased lipase levels (227 iu/l), along with a biological inflammatory syndrome marked by a CRP level of 106 mg/l without hyperleukocytosis, and vitamin D deficiency (45.4 nmol/l).

2.3. Diagnostic assessment

Following the table of scrotal swelling, an ultrasound was initially performed, which showed thickening of the subcutaneous tissues at the level of the right purse, associated with a weakly echogenic compartmentalized effusion and a heterogeneous appearance of the epididymis.

* Corresponding author.
E-mail addresses: firstallof@gmail.com (Y. Kouiss), t.aider@ch-beauvais.fr (T. Aider), irziirzi1992@gmail.com (M. Irzi), Anouar.elmoudane@gmail.com (A. El moudane), alibarki@hotmail.com (A. Barki).

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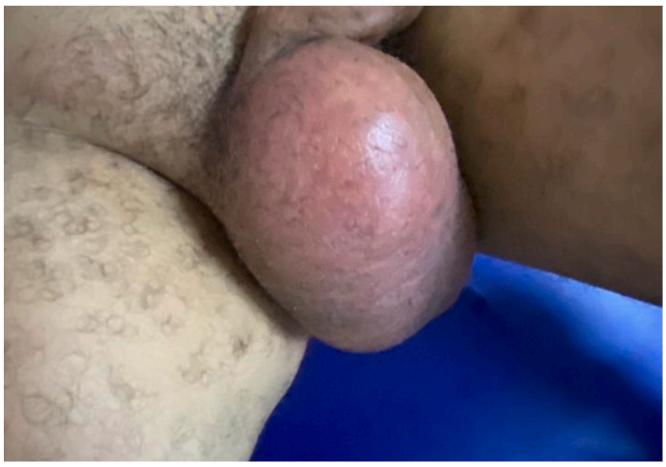

Fig. 1. Clinical aspect in favor of orchi epididymitis.

This finding initially suggests an infectious origin (orchi-epididymitis). Faced with abdominal pain, a CT scan was performed, revealing probable acute pancreatitis, stage E, of the head of the pancreas, with infiltration of the pancreatico-duodenal sulcus and casting of necrosis extending from the right hypochondrium to the right testicular bursa (Fig. 2).

Faced with persistence of abdominal pain, a follow-up scan was performed 7 days after the initial scan, which showed swelling and heterogeneous enhancement of the head of the pancreas, consistent with acute cephalic pancreatitis. There was an increase and organization of the necrosis into a collection. Notably, the necrosis extends to the right bursa through a wide-caliber inguino-scrotal canal. In response to this development, the urology team decided to maintain.

2.4. Therapeutic attitude

Antibiotic therapy, with the advice of the gastroenterologist, was initiated to implement conservative treatment for acute pancreatitis. This included a liquid diet in the first instance, intravenous hyperhydration, and analgesia.

The clinical and biological evolution of the patient was satisfactory after 3 weeks, with improvements noted in both pancreatic and scrotal locations.

3. Discussion

Only about twenty cases are reported in the literature. Many authors insist on the significant risk of diagnostic error at the start, with the consequent possibility of unnecessary surgery, this all the more so as the abdominal symptomatology is not always associated[2] presented to the emergency room for an array of orchi-epididymitis or testicular torsion.

The delay between testicular and abdominal symptoms is variable. Often, testicular symptoms appear a few days before the acute abdominal syndrome like our case. Sometimes, the symptoms can be concomitant.

Some authors have performed a puncture of the scrotal fluid to drain this collection and to guide therapy, having the characteristic of a high level of amylase and lipase.[3]

The 2012 Atlanta Consensus concerning complicated acute pancreatitis of fluid collections states that basic antibiotic therapy is not recommended unless there is a suspicion of infection from these collections. (4)

Some authors suggest that in the absence of patient response to therapy, pigtail drainage of collections should be considered as part of the intensified approach.[5]

It is also important to diagnose emergency that is the epididymitis in

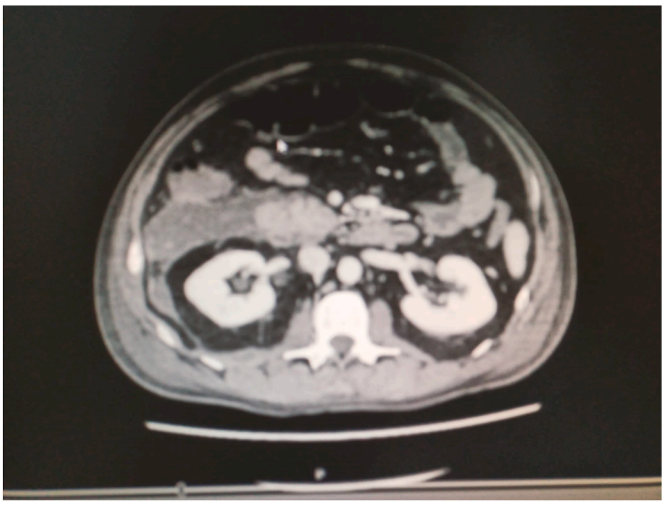

Fig. 2. CT appearance in favor of acute pancreatitis.

doppler ultrasound scan and Doppler ultrasound to be carried out in this situation.

In order to avoid a can lead to surgery regarding the management of this complication, no consensus has been established. Consensus has been established.

4. Conclusion

Concerning the therapeutic attitude of this affection scrotum, no consensus has been established.

The two key examinations to be carried out in the face of this scrotal complication are the abdomino-pelvic CT scan and Doppler ultrasound of the testicles to avoid an erroneous therapeutic attitude, including surgical procedures, which can be deleterious.

According to the Atlanta Consensus of 2012,[4] antibiotic therapy, in principle, is not recommended unless there is a suspicion of infection in these collections.

CRediT authorship contribution statement

Youssef Kouiss: Writing – original draft. **Tarik Aider:** Resources, Data curation. **Mohammed Irzi:** Writing – review & editing. **Anouar El moudane:** Writing – review & editing. **Ali Barki:** Supervision.

Declaration of competing interest

- All human subjects provided written informed consent with guarantees of confidentiality.
- Institutional review board, ethics committee or ethical review board study approval: N/A:
- Approval of the research protocol by an Institutional Reviewer Board: The study is exempt from ethical approval in our institution.
- This article is not a case series.
- Informed Consent: Written informed consent was obtained from the patient for publication of this case report and accompanying images.
- Registry and the Registration No. of the study/trial: N/A.

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