

Case Report

Unusual presentation of acute pancreatitis mimicking strangulated inguinal hernia in a patient with bladder exstrophy: a rare case report

Vijayakumar C., Reddy VJ, Elamurugan T. P.*, Jagdish S.

Department of Surgery, Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Pondicherry - 605006, India

Received: 01 July 2017

Accepted: 04 July 2017

*Correspondence:

Dr. Elamurugan T. P.,

E-mail: elamurugantp@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Acute pancreatitis (AP) is a common surgical emergency. Apart from the typical clinical presentation, unusual presentations are also reported in literature. Here we present a case of acute pancreatitis presenting as a strangulated inguinal hernia. A 45-year-old male with a neglected bladder exstrophy and reducible left inguinal hernia since childhood presented with pain over the left inguinal swelling for three days duration. Patient was initially managed conservatively since there were no signs of complication. After initial conservative management, the patient developed features of strangulation and was taken up for inguinoscrotal exploration. Intra-operatively, direct inguinal hernial sac was identified without any bowel obstruction. Further explorative laparotomy revealed an inflamed, bulky pancreas. The peri-pancreatic fluid aspirated intra-operatively had an amylase value of >4000 IU. Postoperative period was uneventful and patient was discharged after 8 days. In this case an already reducible hernia became irreducible due to pancreatic fluid collection and inflammation of contents. Lack of abdominal symptoms or signs can lead to misdiagnosis and unnecessary surgery. We report an unusual presentation of acute pancreatitis mimicking a strangulated inguinal hernia in a patient with bladder exstrophy.

Keywords: Bladder exstrophy, Pancreatitis, Surgical emergency, Strangulated hernia

INTRODUCTION

AP is an acute inflammatory process of the pancreas with/without involvement of regional tissues or remote organs.¹ The clinical presentation of pancreatitis is highly variable. It commonly presents with acute epigastric pain radiating to the back, nausea and vomiting. The diagnosis is arrived at from history, enzyme levels (amylase or lipase) and imaging studies.² There is very scarce literature on acute pancreatitis presenting as an inguinoscrotal swelling.³ The wide variety of presentation can lead to delay in diagnosis and management of AP. Here we present a case of AP presenting as a strangulated inguinal hernia.

CASE REPORT

A 45-year-old gentleman with a neglected bladder exstrophy and reducible left inguinal hernia since childhood, presented to the emergency medical services, with complaints of pain in the left inguinal swelling for 3 days. The patient did not complain of abdominal pain, nausea or vomiting. He did not have altered bowel habits. He gave history of frequent alcohol intake for 20 years of age. He does not give history of any similar episode in the past. On examination, the patient had bladder exstrophy and had an irreducible left inguinal hernia but did not show any feature of obstruction/strangulation. The patient was managed conservatively for 2 days as a

case of irreducible inguinal hernia, during which period he was stable and did not show worsening of symptoms.

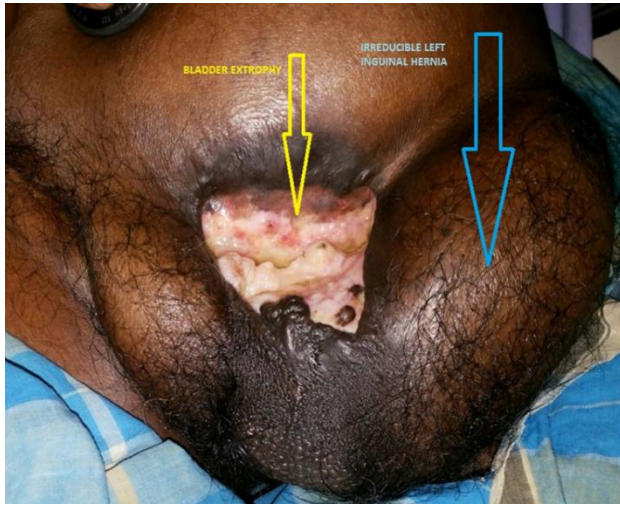


Figure 1: Bladder exstrophy with irreducible left inguinal hernia.

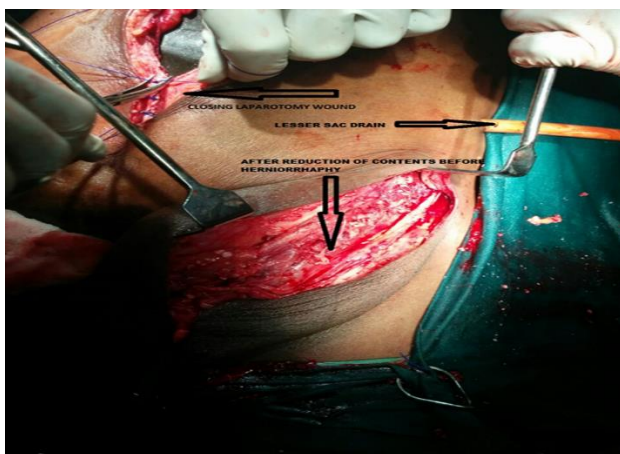


Figure 2: Irreducible direct inguinal hernial sac with saponification of epiploicae and serosanguinous fluid.

On the 3rd day of admission patient had multiple episodes of bilious vomiting and increase in the intensity of pain over the left inguinal swelling. He also complained of abdominal distension and did not pass stool or flatus. Clinically the left inguinoscrotal region was found to be erythematous, tender, irreducible and was associated a tense and distended abdomen. X-ray revealed dilated small bowel loops with multiple air fluid levels in an erect film. Ultrasound revealed dilated small bowel loops with to and from peristalsis of the bowel loops suggestive of intestinal obstruction. The patient was diagnosed to have strangulated left inguinal hernia and emergency left inguinoscrotal exploration was done. Intra-operatively an irreducible direct inguinal hernial sac was identified containing ileal loops and sigmoid colon which was oedematous and inflamed with saponification of epiploicae and serosanguinous fluid. No gangrenous segment was identified.

Further explorative laparotomy revealed an inflamed, bulky but viable pancreas with saponification in the omental fat and small bowel mesentery. Thorough peritoneal lavage and drain was placed and left inguinal herniorrhaphy was done.

The fluid aspirated intra-operatively had an amylase value of >4000 IU/L. Serum amylase was found to be 1200 IU/L. Postoperative period was uneventful and patient's condition improved and drain was removed on the post-operative day 4 and was discharged after 8 days.

DISCUSSION

AP is a potentially fatal disease with a mortality rate of 5%. Given the dangers of misdiagnosing pancreatitis, awareness of unusual presentations is of paramount importance. Alcohol abuse, gallstones, hypertriglyceridemia, hypercalcemia, medications, ERCP, and trauma account for most cases of AP. However approximately 20% remain idiopathic.¹ AP has a myriad of presentations where very few cases reported in literature underwent surgical exploration.² Almost all reports are associated with severe pancreatitis. Even though most of them had acute fluid collection in the inguinoscrotal region, AP presenting as a mass in the inguinal region is extremely rare.³ Erythema may occur over the swelling due to localised fat necrosis secondary to enzyme-rich pancreatic exudates or irritation from necrotic pancreatic debris. Acute idiopathic inguinoscrotal edema is a rare complication of AP and could be mistaken for a more common pathology.⁴

The fluid in peri-pancreatic collections can track retroperitoneally into the inguinoscrotal region, traversing the deep and superficial inguinal ring. In this case an already reducible hernia became irreducible due to pancreatic fluid collection and inflammation of contents.⁵ In the pathogenesis of AP, secretions may extend to unusual anatomical locations, presenting with clinical features which may be misinterpreted, unless there is a high index of clinical suspicion.⁶ As pancreatitis progresses, fluid arising from the pancreas can leak into the retroperitoneal and peritoneal spaces.⁷ In such a scenario it can mimic obstructed hernia, testicular torsion, acute epididymo-orchitis, hydrocele or testicular tumour.⁸ The management of such should be the least invasive possible method but also the most complete possible method to avoid unnecessary interventions. This case highlights the challenging nature of diagnosing pancreatitis and the importance of retaining a high index of clinical suspicion for AP in patients with abdominal pain or systemic illness of obscure aetiology.

CONCLUSION

AP manifesting as inguinoscrotal swelling is a rare presentation, causing a diagnostic dilemma. The presence of a congenital anomaly in the form of bladder exstrophy where inguinal hernia is common is causing additional

diagnostic challenge. A missed diagnosis may lead to unnecessary surgery and improper or delayed treatment.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

REFERENCES

1. Nadhem O, Salh O. Acute pancreatitis. An atypical presentation cases. Rep Gastroenterol. 2017;11(2):359-63.
2. Nazar MA, D'Souza FR, Ray A, Memon MA. Unusual presentation of acute pancreatitis. An irreducible inguinoscrotal swelling mimicking a strangulated hernia. Abdom Imaging. 2007;32(1):116-8.
3. Dennison AR, Royle GT. Acute pancreatitis-presentation as a discoloured lump in the groin. Postgrad Med J. 1984;60:374-5.
4. Moens L, Yengue P, Assenmacher C. Intrascrotal collection in an acute pancreatitis. A case report and review of the literature. Case Rep Urol. 2016;2016:7534781.
5. O'Sullivan KE, Larkin JO, Guiney M, Reynolds JV. Necrotising pancreatitis presenting as a painful mass in the groin and sepsis. BMJ Case Rep. 2013;2013:bcr2013008726.
6. Deshmukh S, Roberts K, Morris-Stiff G, Smith A. Pancreatico-psoas fistula. a rare complication of acute pancreatitis. BMJ Case Rep. 2012;2012:bcr1120115083.
7. Wilde C, Abdelrazeq A. Acute scrotal pain as sole presentation of acute pancreatitis. Int J Surg Case Rep. 2015;6:71-2.
8. Kalia S, Gupta R, Shenvi SD. Inguinoscrotal region as an unusual site of extra-pancreatic collections in infected pancreatic necrosis. Gastroenterol Rep (Oxf). 2016;4(3):246-50.

Cite this article as: Vijayakumar C, Reddy VJ, Elamurugan TP, Jagdish S. Unusual presentation of acute pancreatitis mimicking strangulated inguinal hernia in a patient with bladder exstrophy: a rare case report. Int Surg J 2017;4:2871-3.