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CASE REPORT

The Scrotum in Pancreatitis: A Case Report and Literature Review

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ABSTRACT

Context An acute inguinoscrotal swelling appearing during the course of acute pancreatitis is rare. There are only three case reports of this in the English literature.

Case report We report a case of right inguinoscrotal swelling appearing during an attack of acute pancreatitis.

Conclusions A correct diagnosis and appropriate management will prevent unnecessary surgical intervention.

INTRODUCTION

Pancreatic enzyme rich fluid is known to track widely in the retroperitoneum in cases of severe acute pancreatitis and in chronic pancreatitis associated with major duct disruptions. We present the case of an elderly man with acute alcoholic pancreatitis and a painful right inguinoscrotal swelling, and we review the literature on the involvement of the scrotum in pancreatitis.

CASE REPORT

A 60 year old farmer, a known diabetic and hypertensive with chronic renal failure presented to the Emergency Department with a 2 day history of vomiting and abdominal pain radiating to the back. He was a chronic consumer of alcohol. On examination, he was pale and dehydrated. His abdomen was distended with a tender, ill-defined mass in the right lumbar region. The serum amylase level at admission was 6,460 IU/L (reference range: 0-200 IU/L) and the serum lipase level was 6,190 IU/L (reference range: 0-190 IU/L). He was acidotic and his creatinine was 5.1 mg/dL (reference range: 0-1.2 mg/dL). Based on these findings, a diagnosis of severe acute pancreatitis was made.

On the third day after admission, he developed fever and a painful swelling of the right side of his scrotum (Figure 1). A non-contrast CT scan showed a retroperitoneal collection on the right side which appeared to arise from the head of the pancreas and extend down to the root of the scrotum through the right inguinal canal (Figures 2 and 3). Fluid from the scrotal swelling was found to have an amylase activity of 1,183 IU/L. The fluid was sterile on culture. Ultrasound guided drainage of the retroperitoneal collection resulted in his becoming apyrexial and the scrotal swelling

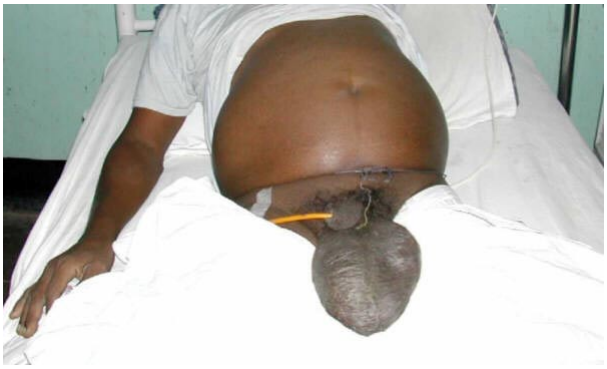

Figure 1. Clinical photograph showing the abdominal distension and the right scrotal swelling.

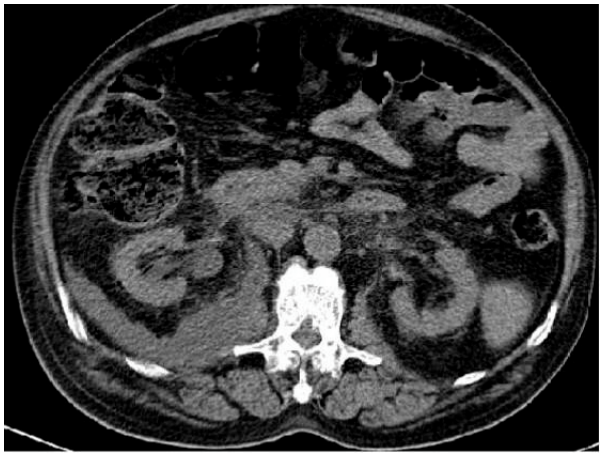

Figure 2. Non-contrast CT scan of the abdomen showing a retroperitoneal collection arising from the head of the pancreas.

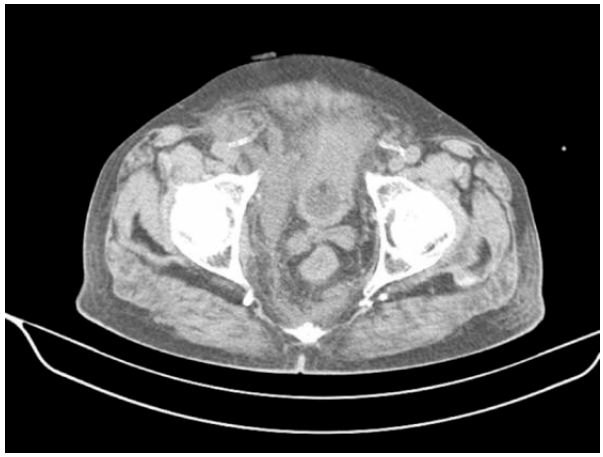

Figure 3. Non-contrast CT scan of the abdomen showing the collection tracking down to the right inguinal canal.

also disappeared. He had a protracted hospital stay due to persistent drainage from the collection, which eventually subsided. At discharge, he was tolerating an oral diet, was afebrile, and the abdominal and scrotal swellings had not recurred.

DISCUSSION

Acute hemorrhagic pancreatitis is a diagnosis that is usually made on clinical grounds. The physical signs of Cullen and Grey Turner are generally difficult to demonstrate in the dark-skinned Indian population. Downward tracking of pancreatic fluid into the scrotum was first described in 1979 in the former USSR [1]. Available literature on this seems to suggest that scrotal involvement is a feature of severe acute pancreatitis. The involvement of the scrotum in acute pancreatitis can be mistaken for an acute scrotum due to torsion testis and lead to unnecessary surgical exploration [2]. Scrotal necrosis secondary to acute pancreatitis has also been reported [3]. Although ultrasound and color Doppler features of the condition have been described [4, 5], the diagnosis can be made with certainty through a CT scan of the abdomen, which will enable the scrotal collection to be traced to an inflamed pancreas. In the case presented above, the scrotal swelling appeared after the diagnosis of acute pancreatitis had been established, but it is to be emphasized that patients with acute pancreatitis can present with an inguinoscrotal swelling alone and the diagnosis can be missed. The correct diagnosis is important because such cases can be managed non-operatively and surgical exploration will only add to the morbidity.

CONCLUSION

This case is reported in order to highlight a unique presentation of acute pancreatitis and the importance of correctly diagnosing the same. A correct diagnosis and appropriate management will prevent unnecessary surgical intervention.

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Keywords Hydrocele; Pancreatic Juice; Pancreatitis, Acute Necrotising

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