Scrotal Hydrocele in Acute Pancreatitis

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Acute pancreatitis is a common diagnosis. Although extremely rare, extravasated pancreatic fluid has the potential to third space into the peritoneal cavity or retroperitoneal space. We report the case of a 33-year-old male with idiopathic subacute pancreatitis who developed acute scrotal pain and swelling. Computer tomography of the abdomen/pelvis revealed tracking of peritoneal fluid into the scrotum consistent with a pancreatic hydrocele, confirmed by ultrasound. He was taken to the operating room for exploration and evacuation of the scrotal hydrocele. This case highlights the importance of active surveillance for the potential development of a scrotal hydrocele in acute pancreatitis.

CASE REPORT

A patient presented with symptoms consistent with acute pancreatitis. Amylase and lipase levels were 173 U/L and >4000 U/L, respectively. He developed right lower quadrant pain radiating to his right scrotum. Computer tomography scan revealed edema of the right hemiscrotum and inguinal canal and a right hydrocele (Fig. 1). Within 2 days, the swelling

Figure 1. (A) Coronal image from an IV contrast CT showing pericholecystic fluid in the right upper quadrant and right hydrocele (arrow). (B) Coronal CT image showing edema of the right inguinal canal with fluid tracking to the right scrotum (arrow). (C) Transverse ultrasound imaging demonstrating a right hydrocele.

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increased and there were skin changes (loss of rugae), with progressive swelling, spreading to the contralateral hemiscrotum (Fig. 2). He did not have psoas spasm.

Intraoperatively, careful dissection around the spermatic cord was done. He had thickened scrotal subcutaneous tissues and 100 mL of cloudy hydrocele fluid (Fig. 3) was evacuated, which had a lipase level >4000 U/L. A 10-Fr drain was placed along the path of the spermatic cord and another to drain the interstitial tissues. Postoperatively, each drain put out approximately 50 mL/day and decreased steadily. The last drain was removed 11 days later. He had an uneventful postoperative course.

Few cases have reported scrotal involvement from acute pancreatitis.1,2 Pancreatic enzyme-rich fluid has potential to track into the retroperitoneum and inguinal canal resulting in a hydrocele.3,4,5 Urologists should consider in the differential diagnosis pancreatitis as the etiology of the scrotal pain and swelling.

Figure 2. (A) Initial right scrotal swelling. (B) Progressive right scrotal swelling 24 hours later.

Figure 3. (A) Immediate preoperative photo. (B) Intraoperative photo showing the right testicle (top white arrow) and hydrocele cavity (bottom white arrow). (C) Cloudy hydrocele fluid. (D) Immediate postoperative photo with drains in place. (E) Healed scrotum 6 weeks postoperatively.
References