Scrotal Abscess, an Unusual Manifestation of Crohn’s Disease

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ABSTRACT
Crohn’s disease (CD) is a chronic inflammatory disorder of the alimentary tract, usually involving the ileum and proximal colon, which is sometimes associated with extra intestinal manifestations. Urollogic complications of CD are rarely reported in literature. CD-related complications involving the urinary tract include infections and urolithiasis as the most common manifestations. Rare more serious occurrences associated with penetrating type disease include ureteral obstruction and enterovesical fistulization. Here, a rare case of CD complicated with a recto-scrotal fistula and the scrotal abscess is presented.

Key words: Abscess, Crohn’s disease, fistula, scrotum

INTRODUCTION
Crohn’s disease (CD) usually involves the ileum and proximal colon. Urologic complications of CD are seldom reported. CD-related complications involving the urinary tract include infections and urolithiasis. This patient presented with scrotal abscess which then was revealed to be a rare complicated case of CD.

CASE REPORT
A 32-year-old male presented to the emergency room with a high-grade fever complaining of huge painful and right scrotal swelling. The swelling started 5 days prior to the presentation, increasing progressively in size. The patient had no history of trauma, neither burning micturition nor similar swelling in the past. The patient had previously been diagnosed with Crohn’s disease (CD) with a documented vesicointestinal fistula [Figure 1].

The physical examination reviled an ill-looking toxic cachectic patient. The temperature was 39.5°C; blood pressure was within normal range; there was a huge tense and severely tender right scrotal swelling measuring approximately 20 cm × 15 cm [Figure 2]. The overlying skin was warm and edematous. The testis could not be palpated. Digital rectal examination was done; no obvious fistulas were felt although some tenderness was encountered at the anterior part of the rectum.

The laboratory investigations showed elevated leukocytic count and raised ESR. Ultrasound was performed and...
it showed normal testes with normal intratesticular flow using Doppler. Marked scrotal wall thickening was present. There was an evident right-sided fluid collection with the appearance of internal septation and loculation [Figure 3]. The patient was informed about his condition; the need for emergency incision and drainage was explained. However, the patient refused admission and was discharged against medical advice.

Two days later, the patient presented with increased swelling, persistent fever, and septic shock. He was admitted, resuscitated, and shifted to the operating room for emergency incision and drainage; almost 500cc of pus was drained from the right hemiscrotum [Figure 4]. There was an associated ischiorectal fossa abscess. Intraoperatively, the right testis was examined, and it appeared normal; the wound was left open. The patient was kept on intravenous antibiotics and daily dressing until his condition stabilized, and his laboratory results returned to normal. The culture of the drained pus showed heavy growth of *Proteus mirabilis* and *Escherichia coli*, were both sensitive to the already prescribed antibiotics. The patient was discharged in good condition on oral antibiotics and daily dressing.

On follow-up, he was feeling well; the wound was healing with the formation of healthy granulation tissue.

**DISCUSSION**

CD is a chronic granulomatous inflammatory disorder of the intestine. Crohn *et al.* first described it in 1932.[1] The incidence of IBD is increasing worldwide, including Saudi Arabia.[2] Urogenital complications in CD are not frequently encountered. The most frequent conditions include fistulous disease involving the genitourinary tract, nephrolithiasis, and intrinsic renal diseases.[3]

A study by Steinberg *et al.* followed 360 patients with CD for a mean of 13 years. Abscess and/or fistulae were found in 65 patients. A total of 44 patients had 59 abscesses, of which 33 were in the abdominal wall, and 26 were found within the abdomen. Thirteen of these

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**Figure 1:** Cystogram showing a vesicointestinal fistula.

**Figure 2:** Huge tense and right scrotal swelling measuring about 20 cm x 15 cm.

**Figure 3:** Ultrasound of the right test is showing marked scrotal wall thickening and fluid collection with the appearance of internal septation and loculation.

**Figure 4:** Operating room photo showing incision and drainage of right hemiscrotal abscess, almost 500 cc of pure puss was drained from the right hemiscrotum.
abscesses occurred spontaneously, and the remainders were in patients who had had a previous operation. Of the 13 patients presenting with a spontaneous abscess, three presented on the skin’s surface and required drainage.[4]

A review of literature did not reveal any examples of scrotal abscess as a complication of CD. Fahmi et al. reported a case of labial abscess in an Indian female in 2010.[3] They reported a trans-sphincteric fistula extending from the rectum anteriorly and bilaterally into the labia and inflammatory changes in the left ischioanal fossa. The patient was diagnosed as having a colo-labial fistula with associated abscess formation. Similarly, our patient had a recto-scrotal fistula extending from the ischiorectal fossa.

When compared to females, male patients with CD rarely suffer from genital involvement. Few reports described the prostate gland and proximal urethra abscess formation from direct extension of perianal inflammatory disease. Clinical presentation includes local swelling or ulcerations, usually associated with perianal fistulæ.[5,6]

In summary, the involvement of the urinary tract and genital organs is not uncommon in patients suffering from CD. Urological complications are often clinically unsuspected because of the dominant intestinal or systemic symptoms. Knowledge of their manifestations and imaging appearances is necessary to recognize and report them.[7‑9] The topic of urogenital complications of CD is rare but clinically important.

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Conflicts of interest
There are no conflicts of interest.

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