

A middle-aged man with scrotal and perineal pain

Quiz

A 53-year-old man, with a history of metastatic lung cancer treated with chemotherapy, presented with a high fever and in poor general condition in September 2008. He was found after slipping and falling in a toilet and was therefore admitted to hospital. He appeared to be suffering acute sepsis and a physical examination revealed tenderness over his scrotum and perianal region. An X-ray of his pelvis (Fig 1) was performed to look for fractures. What was he suffering from? Computed tomography (CT) of his lower pelvis (Fig 2) was also performed to delineate the extent of involvement.



FIG 1. An X-ray of the pelvis shows numerous radiolucent pockets in the soft tissues overlying the left hemiscrotum and perineum

Comment

The anteroposterior pelvic X-ray (Fig 1) shows numerous radiolucent pockets in the soft tissues overlying the left hemiscrotum and perineum, representing extensive subcutaneous emphysema. A corresponding CT scan of the lower pelvis, including the scrotum, shows extensive gas pockets and inflammatory changes along the left side of his scrotum and perineum (Fig 2). There is also an abscess in the right perianal region. Overall, these pictures are compatible with Fournier gangrene.^{1,2}



FIG 2. Computed tomographic scans of the lower pelvis including the scrotum shows extensive gas pockets and inflammatory changes along the left side of the scrotum and perineum. There is also an abscess in the right perianal region

Fournier gangrene is a rapidly spreading disease with a high mortality rate that is considered a urologic emergency.^{3,4} It was first described by Jean Alfred Fournier, a French venereologist, in 1883. Fournier gangrene is most commonly found in middle-aged men (mean age, 50-60 years). There is often a point of entry for polymicroorganisms, via urethral, rectal, or subcutaneous tissue, then a rapidly progressive necrotising fasciitis spreads through the tissue planes in the perineum.

The most common predisposing factor for Fournier gangrene is diabetes mellitus. Other important predisposing factors include alcohol abuse, trauma, surgical procedures, malignancy, steroids, chemotherapy, and immunodeficiency.

Patients usually present with sudden onset of perineal pain and swelling. They may also have high fever and leukocytosis. Physical examination reveals tenderness, redness, and swelling over the perineum and scrotum. Crepitus may also be identified during a physical examination.

Although a diagnosis of Fournier gangrene should be made clinically, CT still plays a useful role if the clinical diagnosis is uncertain or the extent of the

disease is difficult to discern. Computed tomography can better delineate retroperitoneal extension of the disease and is useful for differentiating between

Fournier gangrene and less aggressive entities like cellulitis, which may resemble Fournier gangrene on physical examination. high mortality rate, therefore rapid diagnosis and treatment are crucial.

Fournier gangrene is managed by radical debridement of all necrotic areas.⁵ Multiple debridements may be needed to remove all necrotic tissue and the patient needs to be haemodynamically stabilised and given intravenous antibiotics. Even when managed well Fournier gangrene has a very

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