Early Fournier Gangrene

HENRY JIA-SHOU TSAI, REN-JEN TSENG

A 61-year-old obese man with a twenty-year diabetes history appeared sluggish and unkempt on presentation. He had a body temperature of 35°C, elevated blood pressure 144/183 mmHg and an elevated heart rate of 119 on arrival; however, he only complained of anorexia and poor blood sugar control lasting one week. A thorough whole body examination revealed an erythematous scaly wrinkled scrotum with a reddish tender tip at the prepuce, intertrigo of bilateral inguinal crease without crepitus or any wound, right medial thigh skin erosion, and livedo reticularis of lower limbs. A laboratory workup found leukocytosis and diabetic ketosis 34900 /ul white blood count and 649 mg/dl blood sugar, which further supported the suspicion of Fournier gangrene (1). A plain film X-ray displayed an engorged urinary bladder and gas in the scrotal sac (Fig. 1).

The insidious onset and high mortality rate of Fournier gangrene makes an early diagnosis critically important. In the early stages of Fournier’s gangrene, dehydration and a thick fatty layer, skin erosion, and livedo reticularis of lower limbs. A laboratory workup found leukocytosis and diabetic ketosis 34900 /ul white blood count and 649 mg/dl blood sugar, which further supported the suspicion of Fournier gangrene (1). A plain film X-ray displayed an engorged urinary bladder and gas in the scrotal sac (Fig. 1).

The insidious onset and high mortality rate of Fournier gangrene makes an early diagnosis critically important. In the early stages of Fournier’s gangrene, dehydration and a thick fatty layer, skin erosion, and livedo reticularis of lower limbs. A laboratory workup found leukocytosis and diabetic ketosis 34900 /ul white blood count and 649 mg/dl blood sugar, which further supported the suspicion of Fournier gangrene (1). A plain film X-ray displayed an engorged urinary bladder and gas in the scrotal sac (Fig. 1).

The insidious onset and high mortality rate of Fournier gangrene makes an early diagnosis critically important. In the early stages of Fournier’s gangrene, dehydration and a thick fatty layer, skin erosion, and livedo reticularis of lower limbs. A laboratory workup found leukocytosis and diabetic ketosis 34900 /ul white blood count and 649 mg/dl blood sugar, which further supported the suspicion of Fournier gangrene (1). A plain film X-ray displayed an engorged urinary bladder and gas in the scrotal sac (Fig. 1).

Fig. 1 The plain film X-ray displays gas in the scrotal sac (white arrow), and an engorged bladder (black arrow head)
as in this obese diabetic patient, may obscure typical crepitus and severe bulging. Subcutaneous air in the perineum that is detected on plain film X-ray may be one of the earliest specific signs that suggest Fournier gangrene. Unfortunately, the definitive signs of Fournier’s gangrene diagnosis, such as crepitus and gas on plain film X-ray, are only detected in 14% and 9.5% of patients, respectively. The patient was discharged in a stable condition after more than three months of aggressive antibiotic therapy and debridement.

References