Introduction:

Fournier gangrene is an uncommon and life-threatening infection that impacts the genital and perineum region. Despite optimal modern medical treatment, Fournier gangrene has an exceptionally high mortality rate. Early surgical intervention is critical for increased likelihood of recovery. Nevertheless, Fournier gangrene frequently manifests with generalized sepsis symptoms, which can pose a diagnostic challenge in the emergency department. We report a case of a middle-aged woman who was diagnosed with Fournier gangrene but presented with an unusual symptom of left flank pain.

Case description:

A 42-year-old female patient presented to the emergency department after having fever for six days, followed by two days of diarrhoea, vomiting, and left flank pain. She presented at an outpatient clinic on the fifth day of her illness; however, she was discharged with symptomatic treatments. The following day, the patient revisited a district hospital and was given a diagnosis of leptospirosis and subsequently transferred to a tertiary hospital. Physical examination revealed tenderness and guarded left upper abdominal quadrant with a positive renal punch over the left side. Her abdominal x-ray showed a peculiar "pocket of air" around the left upper quadrant. Based on these clinical findings, a provisional diagnosis of severe sepsis secondary to emphysematous pyelonephritis was given. Later a computed tomography (CECT) revealed extensive Fournier gangrene with air-containing collections involving the perineum and perianal regions, extending to the extra- and retroperitoneal spaces.

Discussion:

The patient was admitted for further operative management. During a lower midline laparotomy, a 150cc pus was found in the Retzius space and posterior to the pubic symphysis. Additionally, there was a 400cc pus in the right ischioanal space, and a 500cc pus in the retroperitoneal space. The pus culture revealed Escherichia coli and this was treated with Piperacillin/Tazobactam and Clindamycin. Eventually she was discharged in good condition with a scheduled surgical checkup.

Conclusions:

Fournier gangrene can be remarkably extensive as shown in this case report. The presence of gas shadow on abdominal X-ray, caused by gas-producing organisms, warrants consideration for a diagnosis of Fournier gangrene. Subsequent imaging and prompt surgical intervention are imperative.

Keyword: fournier gangrene, xray, gas shadow