Case	(266) Fournier´s gangrene: the importance of ct.
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CASE PRESENTATION

A 51 year old male was referred to the emergency room by his family physician due to intense left testicular pain and febricula (37,5 º). Orchiepididymitis was diagnosed and antibiotherapy prescribed. 4 days later the patient referred again to emergency room complaining of severe scrotal pain. On examination, the patient was conscious, welloriented, ill-looking, in discomfort and febrile (Temp. 39°C) but hemodynamically stable. There was no other past medical or surgical history of significance.

There was no history of trauma or genital instrumentation. Local examination of genital area revealed redness, edema and crepitus of scrotum. No other physichal findings were observed. Blood reports revealed leucocytosis. Fournier´s gangrene was suspected and CT examination requested in order to confirm diagnosis and to evaluate extension of disease.

CT after intravenous contrast administration including low thoracic, abdominal and pelvis regions was performed. It showed alterations not only in the scrotum but beyond this area, including diffuse stranding and presence of soft tissue gas in the penis, left inguinal canal and in the superficial planes of left abdominal wall (red arrows).

The disease had extended beyond the scrotal area but not above diaphragm level as demonstrated in coronal reformatted images. Intrabdominal extension of disease was discarted.

Emergency surgical debridement of necrotic tissue in combination with antibacterial and detoxification therapy were performed. Extension of the disease described in the CT was confirmed in surgery.

DISCUSSION

Fournier gangrene was first described by Jean Alfred Fournier in 1883 (1). Fournier's gangrene is a serious urologic emergency with a high mortality rate, which ranges from 20% to as high as 70% to 80% (2).

The CT features of Fournier gangrene include softtissue thickening and inflammation. CT can demonstrate asymmetric fascial thickening, any coexisting fluid collection or abscess, fat stranding around the involved structures, and subcutaneous emphysema secondary to gas-forming bacteria.

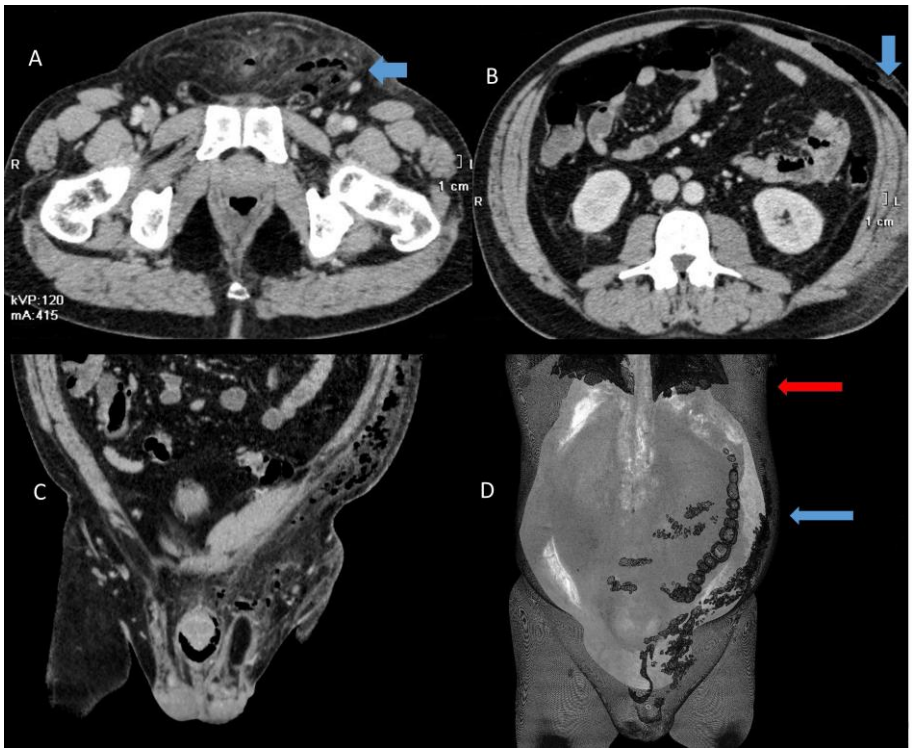
The subcutaneous emphysema in Fournier gangrene dissects along fascial planes and can extend from the scrotum and perineum to the inguinal regions, thighs, abdominal wall, and retroperitoneum (2).

The extent of fascial thickening and fat stranding seen at CT has been found to correlate well with the affected tissue at surgery. CT is superior to physical examination in evaluating the extent of Fournier´s gangrene as demonstrated in this case (2).

CONCLUSION

Patients with Fournier gangrene are subject to emergency hospitalization. The prognosis of the disease is serious and the lethality reaches 90%. CT plays an important role in

diagnosis and in the evaluation of disease extent for planning appropriate surgical treatment.



A: Axial CT image showing soft tissue gas in the inguinal canal (blue arrow).

B: Axial CT image demonstrating soft tissue gas extending through the left abdominal flank (blue arrow).

C: Coronal CT image showing the global extension of the disease, from penis to left extrabdominal flank.

D: Coronal Mini IP CT reformatted image demonstrating extrabdominal soft tissue gas extending through the left flank (blue arrow) but not above diaphragm (red arrow).

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