

Case	(238) Fournier gangrene
Authors	D. Riol Sancho, A. Moujir Sánchez, E.r. Cevallos Castañeda, M.c. González Domínguez, N. González Perera, A. Santana Hernández.
Centre	Complejo Hospitalario Universitario Insular-materno Infantil.

CASE PRESENTATION

A 76-year-old male, came to our emergency department due to a significant increase in scrotum volume in the last two days. It is associated with diffuse cutaneous eritematous changes.

There was a medical history of urinary retention, so he had a bladder catheter. Ultrasound study revealed abundant scrotal gas, with a marked thickening of the scrotal covers measuring up to 25 mm. Both testicles and epididymides appeared normal. Pelvis x-ray was also performed, showing a very extensive subcutaneous emphysema in the scrotum, perineum and abdominal wall.

Then we performed a CT to better define the extension and discard collections. Portal venous phase CT showed stranding of the subcutaneous cellular tissue of the scrotum and perineum, with marked perianal involvement.

The subcutaneous emphysema, that distended the scrotal sac, extended through both abdominal flanks until reaching the thorax on the left side. No organized collections were identified.

DISCUSSION

The presence of subcutaneous emphysema in the perineum in the context of an acute scrotum suggests the diagnosis of Fournier gangrene. It is a rare polymicrobial (*E. coli*, *Klebsiella*, *Proteus*, *Staphylococcus* and/or *Streptococcus*) necrotizing fasciitis of the perineum but with a high mortality rate (15-50%). It is usually observed in diabetic, immunosuppressed and/or alcoholic men aged 50 to 70 years (uncommon in women). It manifests clinically with perineal and scrotal pain and inflammation, with crepitus on physical examination, poor general condition, fever and leukocytosis.

The source of infection may be a fistula or perianal abscess, being the trauma a less common cause. However, many times the cause is not identified. The diagnosis is usually clinical, but radiology has a relevant role when there are doubts or to determine the extent and cause of the disease. Thickening of the scrotal covers and perineal fascias, stranding of the subcutaneous cellular tissue and subcutaneous emphysema can be seen.

The testicles and epididymides are usually normal, allowing to differentiate it from other acute scrotal processes as orchiepididymitis and testicular torsion. These patients require emergent surgical treatment with radical debridement of the necrotic tissue and broad spectrum intravenous antibiotics from the moment of diagnosis.

CONCLUSION

The presence of subcutaneous emphysema in the perineum in the context of an acute scrotum suggests the diagnosis of Fournier gangrene. Radiology is usually necessary for diagnosis and its high mortality makes necessary an emergent surgical and antibiotic treatment.



BIBLIOGRAPHY

- Levenson RB, Singh AK, Novelline RA. Fournier Gangrene: Role of Imaging. *RadioGraphics*, 2008; 28 (2): 519-528.