

A CAUTIONARY TALE OF NECROTISING FASCIITIS OF THE VULVA

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Background

Necrotising fasciitis (or Fournier gangrene) of the female lower genital tract is a surgical emergency associated with very high morbidity and mortality, with the latter ranging from 30 to 50%¹.

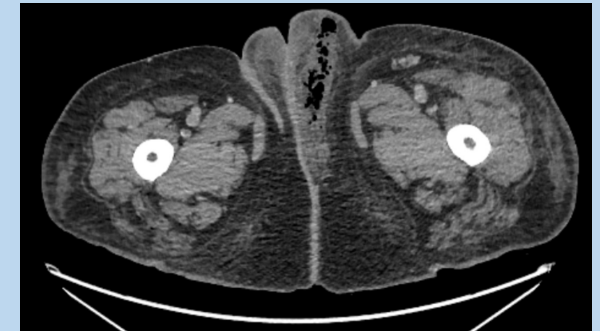
Aims

To discuss a case of necrotising fasciitis of the vulva and associated management.

Case Discussion

A 55-year-old woman presented with a three-day history of vulval and groin pain associated with increased swelling, tenderness and fevers. This is on a background of poorly controlled type 2 diabetes (HbA1c 11.7%), hypertension, hypercholesterolaemia, smoking and an elevated BMI (34.6). Initial pathology showed a WCC of 20.5, CRP of 488 with imaging showing a 6.1x1.9cm abscess of the left paralabial soft tissues with inflammation extending to the mons pubis. She had concurrent diabetic ketosis and sepsis requiring insulin infusion and IV antibiotics. She underwent debridement with cyst excision and draining of copious purulent material. On day 3 she developed worsening pain with increasing induration and necrotic tissue was seen at the base of the wound. Antibiotics were escalated and repeat CT scan showed gas in the soft tissues of the left labium majus and perineum consistent with necrotising fasciitis. She underwent urgent debridement with necrotic tissue extending throughout the left labia to the lower and anterior abdominal walls. She was admitted to ICU.

Over her admission, she required eight visits to theatre for ongoing debridement, closure, and VAC dressing changes. Intraoperative swabs grew staph aureus, strep agalactiae (group B) and genital flora. Prior to discharge there was closure of the wound. She was treated with a prolonged course of antibiotics and ongoing wound care.



(A) clinical photo of vulval cellulitis at admission and (B) CT slide showing gas locules in left labia consistent with necrotising fasciitis

Conclusion

This case illustrates the importance of clinician awareness of potential necrotising fasciitis in patients with multiple risk factors including diabetes, smoking and obesity. It also allows reflection on principles of management of necrotising fasciitis including early recognition, prompt surgical debridement, antibiotics and a multidisciplinary approach.

References

1. Khalid A, Devakumar S, Huespe I, Kashyap R, Chisti I. A Comprehensive Literature Review of Fournier's Gangrene in Females. Cureus. 2023 May 12;15(5):e38953. doi: 10.7759/cureus.38953. PMID: 37197302; PMCID: PMC10184784.