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Necrotizing Fasciitis with Vulvar Origin: About an Observation

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Abstract | **Case Report**

Necrotizing fasciitis is a rapidly spreading soft tissue infection characterized by extensive necrosis of the deep and superficial fascia. It is a polymicrobial infection in approximately 70% of cases. The infection is serious and fatal due to decompensation of underlying defects and septic shock. The occurrence of this clinical entity in healthy subjects is rare. We report through this observation a case of necrotizing fasciitis with vulvar origin in a 76-year-old patient with a serious medical history.

Keywords : Necrotizing Fasciitis, Vulva, Rare Pathology.

INTRODUCTION

Necrotizing fasciitis is a serious and rapidly progressive infectious disease that attacks skin tissue, subcutaneous adipose tissue and eventually muscle tissue [1].

The key to successful treatment lies in early diagnosis and appropriate management. The mainstay of treatment is complete surgical debridement, combined with antibiotic therapy, close monitoring, and circulatory resuscitation. Despite surgical treatment, mortality is around 20% [2].

PATIENT AND OBSERVATION

This is a 76-year-old patient, admitted with a picture of deterioration in general condition with symptoms dating back 2 weeks.

Background

Gynecology and Obstetrics

Menopausal for more than 20 years, no hormonal treatment for menopause. G6P6 all deliveries were carried out vaginally.

Medical

Type II diabetes on oral antidiabetic drugs, high blood pressure on treatment, ischemic heart disease having benefited from angioplasty on treatment.

Surgery

Laparoscopic cholecystectomy 40 years ago.

Concerning Medication Intake

Clopidogrel 75 mg; Atorvastatin 10 mg; Bisoprolol fumarate 10 mg

Clinical Examination

Conscious patient, heart rate at 89 beats per minute, BP = 150/70 mmHg, febrile at 38.3° C, random capillary blood glucose at 1.6 g/dl, SaO2 at 91% in ambient air.

Gynecological examination : (figure 1)

Presence of an edematous erythematous plaque at the level of the left major lip, warm, painful, infiltrated. Presence of crepitation on palpation, fistulized with pus coming out, extended to the ipsilateral thigh, to the suprapubic region, to the abdominal wall up to the level of the umbilicus and to the flanks.

Speculum : cervix and vaginal wall with a macroscopically normal appearance.

Biological Assessments Carried Out

Hemoglobin at 11 g/dl; white blood cells at 17,200 polynuclear neutrophils at 14,758; CRP: 256; Na = 131; Serum potassium = 3.95. Ca = 81 Cl = 98; Hba1c = 11%. Protein = 58

Abdominal Scanner C-/C+

- Hydroaeric collection mainly aeric, involving the region, suprapubic extended towards the left vulvar labia majora, the internal wall of the root of the ipsilateral thigh. At the top it extends towards the soft parts of the right and left anterolateral pelvic and abdominal wall measuring 25 mm in maximum thickness at the level of the left iliac fossa.
- Bilateral inguinal hernia
- CT scan suggests extensive necrotizing fasciitis.

Unremarkable pelvic ultrasound

Therapeutic intervention (figure 2,3,4)

The patient was admitted to the operating room, we proceeded successively:

- Supine position
- Painting and setting up of fields
- Creation of a discharge incision and drainage of pus (sampled for bacteriological study)
- Carrying out a necrosectomy, abundant washing with saline
- Drying and dressing

At the end of the procedure, the patient was put on analgesics and antibiotics.

Annexe

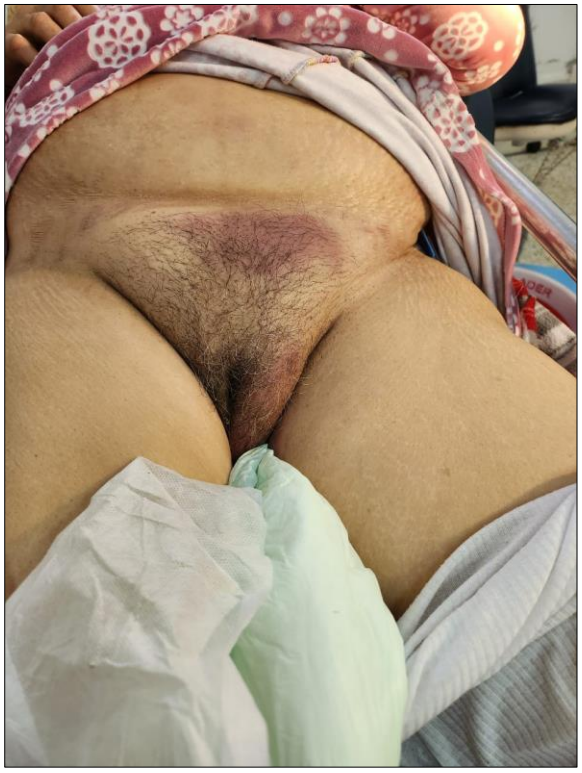

Figure 1: initial appearance at the time of examination

Figure 2: In the operating room, discharge incision.

Figure 3: In the operating room, discharge incision

Figure 4 : In the operating room, necrosectomy

DISCUSSION

Necrotizing soft tissue infection was first described by Hippocrates in the fifteenth century BC, he described it as a complication of acute streptococcal infection [3, 4]. Necrotizing fasciitis is an extremely rare clinical entity, with approximately 1000 cases per year in the United States; it appears that this incidence has increased perhaps as a result of greater awareness of the problem leading to higher reporting rates, increased bacterial virulence, increased resistance to antimicrobials [4]. There is no predilection for age or sex, but higher rates of necrotizing fasciitis were observed in obese, diabetic and immunocompromised patients, as well as in alcoholics and patients with vascular disease. peripheral, it is relatively rare in children. However, necrotizing fasciitis can occur in young healthy subjects, without any of these predisposing factors [5], the case of our patient who was a 76-year-old woman with a medical history of heart disease and diabetes. The onset of symptoms dates back 2 weeks with vulvar folliculitis. The early signs and symptoms of necrotizing fasciitis are the same as those seen with cellulitis or abscesses, potentially making correct diagnosis difficult; usually, erythema, pain beyond the margins of obvious infection, Swelling and fever are the most common physical examination findings [4].

The clinical presentation will vary depending on the causative pathogen, as well as the anatomical region and depth of infection. Livingstone *et al*., [6], reported a case of a 56-year-old man manifested clinically by diffuse erythema and swelling in the right lower limb extending to the medial aspect of the right thigh. Xu LQ *et al*., [3], found in fasciitis caused by Staphylococcus aureus a localized red-purple discoloration on both lower limbs. Tsai YH *et al*., [7], in their case on monomicrobial necrotizing fasciitis caused by Aeromonas hydrophila and Klebsiella pneumoniae reported that swelling of the involved limb with edematous, patchy, erythematous and hemorrhagic bullous skin lesions were the clinical signs observed at the time of admission to the EMERGENCIES. The LRINEC (Laboratory Risk Indicator for Necrotizing Fasciitis) score, a tool to distinguish necrotizing fasciitis from other soft tissue infections. Scores ≥6 were found to have a positive predictive value of 92% and a negative predictive value of 96%.

CONCLUSION

Vulvar necrotizing fasciitis is a rare clinical entity, but its incidence currently appears to have increased. It generally occurs in immunocompromised patients with a medical history; in these subjects the infection is serious and fatal due to decompensation of underlying defects and septic shock. The occurrence of this clinical entity is rare but the outcome is favorable after extensive surgical debridement.

Conflict of Interest: The authors declare no conflict of interest.

Author Contributions: All authors read and approved the final version of the manuscript.

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