

CASE REPORT

A Case of Facial Erysipelas Complicated by Necrotizing Fasciitis

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Received: 26 April 2025 Accepted: 14 May 2025 Published: 16 May 2025

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Abstract

Erysipelas is an acute dermohypodermatitis (non-necrotizing) bacterial infection, mainly caused by group A beta-hemolytic streptococcus. Erysipelas is also known as “Saint Anthony’s fire” due to its intense and burning skin rash. The lower limbs are affected in more than 80% of cases, and identified risk factors include disruption of the skin barrier, lymphedema, and obesity.

A 50-year-old Malian woman, married and a housewife, with no notable medical history, consulted for a necrotic and crusted facial erosion that had been evolving for one week following a traumatic wound, leading to a fever of 38.4°C. She reportedly took a non-steroidal anti-inflammatory drug (Diclofenac), which resulted in transient improvement.

On examination, her temperature was 39.6°C, and there was an erythematous swelling measuring 27 x 20 cm in diameter with a well-defined, hot, painful erosive-crusted surface resembling a geographical map, with areas of fibrino-necrotic base located on the face. The upper and lower eyelids were swollen, causing difficulty opening the eyes. The rest of the examination was unremarkable.

A diagnosis of facial erysipelas complicated by necrotizing fasciitis was made. Treatment with amoxicillin plus clavulanic acid and paracetamol was initiated. Local wound care and tetanus antiserum were also administered. While facial involvement is rare, it does occur and should be suspected in any painful facial swelling. It must be a concern for clinicians, as its complication, necrotizing fasciitis, can be fatal.

Keywords: Erysipelas, Face, Complicated, Necrotizing Fasciitis.

1. Introduction

Erysipelas is an acute dermohypodermatitis (non-necrotizing) bacterial infection, primarily caused by group A beta-hemolytic streptococcus [1]. Erysipelas is also referred to as “Saint Anthony’s fire” due to its intense and burning skin rash. The lower limbs are affected in more than 80% of cases, and the identified risk factors include disruption of the skin barrier, lymphedema, and obesity [2]. The diagnosis is clinical and is based on the presence of an acute inflammatory plaque accompanied by fever,

lymphangitis, lymphadenopathy, and leukocytosis. Its main complication, necrotizing fasciitis, is a medical and surgical emergency. Facial involvement accounts for 20% of other affected areas [3]. We report a case of facial erysipelas complicated by necrotizing fasciitis.

2. Observation

A 50-year-old Malian woman, married and a housewife, with no particular medical history, consulted for a necrotic and crusted facial erosion evolving over one week following a traumatic wound

Citation: Mamadou Gassama, Pierre Kitha, Habibatu Diabakaté, *et al.* A Case of Facial Erysipelas Complicated by Necrotizing Fasciitis. Archives of Dermatology and Skin Care. 2025;7(1):16-18.

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that caused a fever of 38.4°C. She reportedly took non-steroidal anti-inflammatory drugs (diclofenac), which led to a transient improvement. The worsening of pain and local heat at the lesion prompted her to seek medical attention after experiencing chills for four days, during which she again took diclofenac, followed by another period of transient improvement. The exacerbation of pain and local warmth led to her consultation.

On examination, her temperature was 39.6°C. There was an erythematous swelling measuring 27 x 20 cm in diameter with a well-defined, hot, tender erosive-crusts surface, shaped like a geographical map, with areas of fibrino-necrotic base located on the face. The upper and lower eyelids were swollen, with difficulty opening the eyes. The rest of the examination was unremarkable.



Figure 1. *Erosive-crusts plaque with difficulty opening the eyes*

The complete blood count revealed leukocytosis with a predominance of neutrophils. Based on this presentation, a diagnosis of facial erysipelas complicated by necrotizing fasciitis was made. Treatment with amoxicillin combined with clavulanic

acid and paracetamol was initiated, along with local wound care and tetanus antiserum administration. The outcome was favorable after two weeks of hospitalization.



Figure 2. *Erosive plaques*



Figure 3. *Face after healing on day 16oozing from the face after necrosectomy*

3. Argument

Facial erysipelas complicated by necrotizing fasciitis is a medical-surgical emergency due to the proximity of the face to the central nervous system. Erysipelas can affect all body segments, and the cephalic extremity is no exception [4,5]. Facial dermatoses, such as acne, are often cited as contributing factors. In our patient, the facial wound was the starting point, although she did not seek immediate care. Furthermore, the use of NSAIDs accelerated the onset of necrotizing fasciitis. From this case, we emphasize the importance of proper management of lesions and avoiding self-medication, as was the case with our patient. Cavernous sinus thrombophlebitis is one of the complications of facial erysipelas, with the migration of septic emboli through close diffusion [6–8]. The delayed recognition of the severity of the condition is a factor that contributes to the complication of erysipelas into necrotizing fasciitis.

4. Conclusion

Erysipelas can affect any part of the body, and while facial involvement is rare, it does occur and should be suspected in the presence of any painful facial swelling. It must be a concern for clinicians, as its complication, necrotizing fasciitis, can be fatal.

Conflict of Interest: None

5. References

1. Brishkoska-Boshkovski V, Kondova-Topuzovska

I, Damevska K, Petrov A. Comorbidities as Risk Factors for Acute and Recurrent Erysipelas. *Open Access Maced J Med Sci*. 30 mars 2019 ;7(6) :937-42.

2. Rabuel V, Guillier D, Zwetyenga N, Moris V. Necrotizing fasciitis : A highly fatal infection. *Ann Chir Plast Esthet*. Août 2023 ;68(4) :339-45.

3. Rodrigues MA, Caetano M, Amorim I, Selores M. [Non-Necrotizing Acute Dermo-Hypodermal Infections : Erysipela and Infectious Cellulitis]. *Acta Med Port*. 1 mars 2021 ;34(3):217-28.

4. Bonnetblanc JM, Bédane C. Erysipelas : recognition and management. *Am J Clin Dermatol*. 2003 ;4(3) :157-63.

5. Arora G, Patil A, Hooshanginezhad Z, Fritz K, Salavastru C, Kassir M, et al. Cellulite : Presentation and management. *J Cosmet Dermatol*. avr 2022 ;21(4) :1393-401.

6. Aziz Z, Aboulouidad S, Bouihi ME, Fawzi S, Lakouichmi M, Hattab NM. Odontogenic cervico-facial cellulitis during pregnancy : about 3 cases. *Pan Afr Med J*. 2020 ;36 :258.

7. Dezoteux F, Staumont-Sallé D. [Bacterial acute non necrosing cellulitis (erysipelas) in adult]. *Rev Med Interne*. Mars 2021 ;42(3) :186-92.

8. Sapuła M, Krankowska D, Wiercińska-Drapała A. In Search of Risk Factors for Recurrent Erysipelas and Cellulitis of the Lower Limb : A Cross-Sectional Study of Epidemiological Characteristics of Patients Hospitalized due to Skin and Soft-Tissue Infections. *Interdiscip Perspect Infect Dis*. 2020 ;2020 :1307232.