

NECROTIZING FASCIITIS OF THE EYELID CAUSED BY STREPTOCOCCUS PNEUMONIAE

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Abstract

Necrotizing fasciitis (NF) is characterized by the pathognomonic association of rapidly progressing necrosis with edema of the subcutaneous tissue and fascia and extensive undermining of the skin but sparing of the underlying muscle and potentially fatal accompanied by systemic signs of toxicity, which it is mainly observed in legs and abdominal wall, but rarely in the other part of the body such as face and neck. NF is more frequently polymicrobial, often lead in a quick and severe progression of the disease. Soft tissue infectious diseases caused by *S. pneumoniae*, especially NF are rare and few reports document such association. Methods of the diagnose, case report: A 43 years old man, immunocompetent, non-smoker, presented to the emergency service of Infectious Diseases after a period of 12 hours of shivering during the night until in the morning, complaining of pain and swelling of his left eyelid including the face. There was no history of insect bite or trauma of that area. The oral temperature was 39.2°C, pulse was 94 beats/minute, respiratory rate was 27 breaths/minute, and blood pressure was 96/47 mm Hg. There was no nuchal rigidity or lymphadenopathy. The left part of face was significantly edematous, with erythema and few bulous elements filled with a sero-hemorrhagic liquid, as well as induration going down up to mid-neck. It was extremely tender, and no passive movement could be elicited. Initial laboratory investigations showed a white blood cell count of 18,300/mm³ (79% neutrophils, 16% lymphocytes, and 5% monocytes), hemoglobin concentration of 11.5 g/dl, hematocrit of 34.5%, and platelet count of 259,000/mm³. Liver chemistry values were within normal limits. Necrotizing fasciitis was suspected clinically and Ceftriaxone plus Metronidazole were started immediately. *S. Pneumoniae* was isolated in one blood culture and liquid of vesicles. The outcome of NF was towards a total recovery after a local plastic surgery. The bacteria that cause NF act quickly. NF leads inevitably towards a severe sepsis and multiple organ failure which needs an early diagnosis besides of a promptly and aggressive medical and/or surgical intervention.

Keywords: *Necrotizing fasciitis, Skin soft tissue infectious diseases, Streptococcus pneumoniae*