

**Clinical Image**

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**Necrotizing fasciitis of the neck: A rare diagnostic emergency**Isa Eloi<sup>1\*</sup>; Joana Gonçalves<sup>1</sup>; Nuno Silva<sup>1</sup>; João Carlos Ribeiro<sup>1,2</sup>; Jorge Miguéis<sup>1</sup><sup>1</sup>Department of Otorhinolaryngology, Coimbra University Hospital, Coimbra, Portugal.<sup>2</sup>Faculty of Medicine, University of Coimbra, Coimbra, Portugal.**\*Corresponding Author: Isa Eloi, MD**

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**Keywords:** Necrotizing fasciitis; Retro and Parapharyngeal abscess; Trans-cervical drainage.**Description**

A 76-year-old male, with no prior medical history, was referred to our hospital due to odynophagia and fever with 3 days, sudden worsening with dyspnea, drooling, edema and anterior neck pain. Physical examination revealed tachypnea, trismus, halitosis, bulging of the pharyngeal lateral walls and salivary stasis. No evidence of peritonsillar abscess or tonsil exudate was observed.

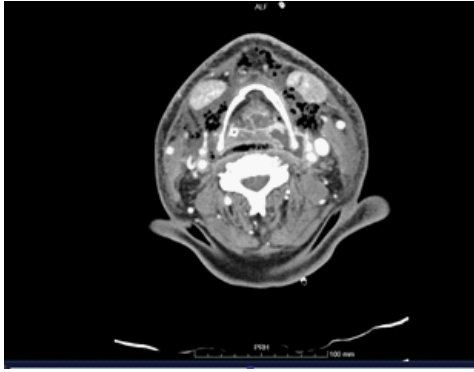
Contrast-enhanced computed tomography (CT) of the neck revealed an organized collection involving both parapharyngeal and retropharyngeal with air bubbles and edema of the surrounding tissues (Figure 1). The patient was immediately admitted, started empiric broad-spectrum antibiotic therapy and submitted to an emergent surgical drainage. After securing the airway with tracheotomy, a trans-cervical drainage was performed. The drained pus had a grayish color and a foul smell. Necrotic tissue of fascia and sternocleidomastoid muscle were removed, as much as possible, without compromising vital structures. The cervical spaces were irrigated with a

diluted solution of povidone-iodine and hydrogen peroxide. Penrose drains were placed and the skin was “loosely” approximated with minimal sutures. (Figure 2). Microbiology of the pus culture revealed the presence of *Streptococcus constellatus*, *Eikenella corrodens*, *Prevotella buccae* and *Parvimonas micra*.

Sequential tissue debridement was necessary at different operative times with favorable clinical evolution.

Necrotizing fasciitis is a highly aggressive polymicrobial infection characterized by necrosis of fascia and subcutaneous tissue. It is an uncommon disease and the presentation of this pathology in the neck is rare.

Necrotizing fasciitis is a surgical emergency with a high rate of mortality and morbidity that requires an early diagnosis. The basis of treatment combines broad-spectrum antibiotic therapy, a surgical approach with exposure and exploration of all affected fasciae, hyperbaric oxygen therapy and supportive care. Complete debridement of necrotic tissue, is crucial for therapeutic success.



**Figure 1:** Contrast-enhanced computed tomography (CT) of the neck revealed an organized collection involving both parapharyngeal and retropharyngeal with air bubbles and edema of the surrounding tissues.



**Figure 2:** Penrose drains were placed and the skin was “loosely” approximated with minimal sutures

### Declarations

**Ethics approval and consent to participate:** Not applicable.

**Consent for publication:** Written informed consent for publication of clinical details and clinical images was obtained from the patient.

**Declaration of conflicting interests:** The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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