

Management of Head and Neck Cellulitis in a Patient Immunocompetent

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Abstract

Case Report

Head and neck cellulitis are severe infections, sometimes necrotizing, whose diagnosis is difficult at an early stage. We report the clinical observation of a 60-year-old patient who presented to the emergency room for a right laterocervical swelling associated with a deterioration in general condition. The head and neck CT scan revealed abscessed right cervical cellulitis. The patient underwent drainage and debridement in the operating room with wide necrosectomy and placement of a Delbet blade, associated with dual antibiotic therapy. The evolution was marked by an improvement in the patient's clinical condition. The aim of this work was to highlight the importance of emergency medical-surgical care, without forgetting the treatment of the portal of entry. The progression in the absence of treatment is towards sometimes fatal complications. The prognosis of these infections depends on the precocity of the treatment, its initial quality and the terrain.

Keyword: severe infections, laterocervical swelling, Head and neck cellulitis, necrosectomy.

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INTRODUCTION

Head and neck cellulitis is an infection of the cellular tissues of the head and neck. These are serious conditions which have a rapid extensive tendency and can be life-threatening. The development of antibiotics has made it possible to radically modify the evolution of this cellulite on the condition that their use is early, appropriate and does not cause the etiological treatment to be forgotten.

CASE REPORT

We present a clinical case of a 62-year-old patient, without notable history, admitted to the emergency room for treatment of a right laterocervical swelling with fever and inflammatory signs nearby (Figure 1).

The patient presented 10 days before his admission with a cervical skin lesion for which he took a non-steroidal anti-inflammatory drug (self-medication). After 4 days of treatment (anti-inflammatory), the patient noticed the appearance of swelling in the neck. This motivated his outpatient consultation with prescription of an ATB treatment consisting of Spectrum and

Gentamicin. On the third days of treatment (antibiotics) he presented to the emergency room for a right laterocervical swelling in pre-fistulization. A cervicofacial CT (Figure 2) was done which revealed abscessed right cervical cellulitis without thoracic extension, the biological assessment showed a CRP at 360 mg/l and WBC at 16,000/mm³.

In our training, the patient benefited from wide drainage with a Paul-André "L" incision and detachment of the upper and lower skin flaps. We also carried out a debridement with wide necrosectomy and placement of a delbet blade to ensure continuous drainage (Figure 3). Trimming was carried out daily in the operating room associated with medical treatment based on biantibiotic therapy including augmentin 1g*3/day and flagyl 500mg*2/day. The bacteriological sample taken intraoperatively revealed gram-positive and gram-negative cocci.

The evolution was marked by an improvement in the patient's clinical condition with a CRP going from 360 mg/l to 9 mg/l but maintaining a loss of substance of 4 cm which was treated by the implementation of a total skin graft (Figure 4).



Figure 1: Right laterocervical swelling in pre-fistulization

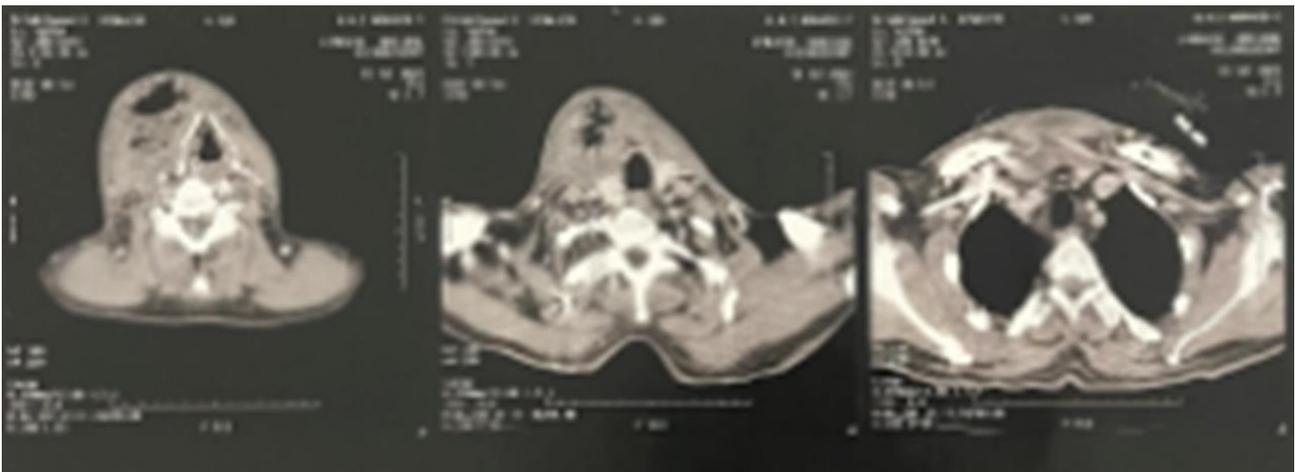


Figure 2: Cervical CT scan with axial sections showing gangrenous infiltration of the right cervical soft tissues, containing an abscessed collection



Figure 3: Trimming and wide necrosectomy with placement of delbet blade



Figure 4: Favorable evolution after 2 weeks maintaining a loss of substance implementation of a total skin graft

DISCUSSION

Head and neck cellulitis are severe infections, sometimes necrotizing, whose diagnosis is difficult at an early stage. Their origin is most often dental, tonsillar or other (cutaneous, sinus, etc.), [1]. They diffuse along the aponeurotic spaces of the face and neck towards the mediastinum. The factors contributing to head and neck cellulitis are numerous: diabetes, alcohol and tobacco poisoning, immunosuppression, taking anti-inflammatory drugs [1]. The diagnosis of cervico-facial cellulitis is clinical based on the conjunction of a serious infectious condition and physical cervico-facial signs. The almost constant cervico-facial swelling is inflammatory and painful.

On its own, it is highly suggestive of cellulite. The association with trismus and odynophagia is usual. Dyspnea should lead to the search for additional mediastinitis. General signs are rarely lacking: fever, chills, sweats [1]. The germs involved are variable; These are most often saprophytic germs from the oral cavity. The predominance of anaerobic germs is unanimous among the authors [2]. CT, thanks to its excellent resolution in tissue and bone density, makes it possible to clarify the inflammatory nature of a cervical swelling, to evaluate its extension and to search for a collection whose detection would require surgical drainage.

Medical treatment is based on targeted antibiotic therapy and effective for serious forms in the context of a adapted resuscitation. For the majority, the reference combination is a triple therapy: Betalactamines (penicillin G at a dose of 6 to 20MIU/24h slowly intravenously), aminoglycosides which have an effect effective synergistic on staphylococcus and certain bacilli gram negative (Gentamycin at a dose of 160mg/24h) and Metronidazole known to be active against anaerobes at a dose of 1.5g/24h. The dose and duration of treatment depend on the type and progression

of cellulite [3]. Surgical treatment is necessary in cases of suppurative collections or areas of necrosis [4]. The intervention must be as complete as possible and the approach wide and expandable; it involves draining but also excising the necrosis and flattening all the cellulitic areas [3]. In the event of associated mediastinitis, drainage via thoracotomy during the same operating time will be considered.

Hyperbaric oxygen therapy provides a bacteriostatic effect on anaerobic germs but is not commonly used [5]. The stomatological treatment is most often carried out after cooling of the infectious process. The best treatment remains preventive: antibiotic prophylaxis during dental care, hygiene oral health, avoidance of excessive prescription of anti-inflammatories.

CONCLUSION

Necrotizing cervico-facial cellulitis of dental origin are serious pathologies with high morbidity and mortality. The key examination is the CT scan. Early emergency medical-surgical treatment through resuscitation measures, appropriate antibiotic therapy, excision of necrotic tissues and drainage of collections constitute the pillars of treatment.

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