



A serious complication of cervical cellulite after tooth extraction: mediastinitis

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ABSTRACT

Cervical cellulitis and necrotizing fasciitis are cervical soft tissue infections developed from dental home or pharyngeal whose risk if they are not recognized early, is the extension to the mediastinum. The first clinical signs are sometimes frustrated and can lead to a delayed diagnosis. The key consideration is the cervical and thoracic CT scan. Treatment consists of broad and repeated tissue excisions associated antibiotic therapy directed against aréo- and anaerobes. We report the case of a man known diabetic with cervical cellulitis of dental origin of mediastinitis complicated.

Keyword : cervical cellulitis, tooth extraction, mediastinitis.

INTRODUCTION

Head and neck cellulitis are relatively rare infectious diseases, which usually result from inoculation transmucosal neck with gradual expansion to almost all of the anatomic neck lodges, they are manifested clinically by a painful swelling with dimpled appearance of the skin pressure [1].

The prognosis of these infections is associated with mediastinal extension whose evolution is fatal without a care quickly good conduct.

Through this observation, we emphasize early diagnosis of this pathology whose therapeutic management is a multidisciplinary real emergency.

MATERIALS AND METHODS

CLINICAL CASE

48y.o. old patient, diabetic insulin, received in the emergency department of Avicenna military hospital in Marrakech swelling laterocervical moving left for a week with fever following a traditional dental extraction, and for which he was hospitalized for six days and put on antibiotics without any initial clinical improvement .L'examen found a conscious patient to 40°C fever, swelling laterocervical inflammatory and painful left without snow crackling, the oral examination revealed a dental abscess with multiple dental caries, Laboratory tests showed leukocytosis with 28,000, a 3.8 g glucose, acetone three crosses in urine .A cervicothoracic CT scan éte' practiced, it

showed a left cervical cellulite with presence of aeric pictures retropharygées extended the anterior and posterior mediastinal level prevertebral and suburban aortiquele, associated with right basal pleuropneumopathie (fugures 1,2,3) .after glycemic correction, the patient was operated on urgently with wide drainage cervicomédiastinal under cover of a tracheotomy, the treatment of the causal tooth was performed in the same operative time, bacteriological sampling réalise' at the neck mass was found cocci tO Gram positive direct examination, culture highlighted a b-hemolytic streptococcus group A sensible. The patient evolved in the middle of resuscitation in appropriate antibiotic therapy based amoxicillin + clavulanate (Augmentin 2g × 3 / day) combined with 5-nitroimidazole (flagyl 500 mg x 3 / day) for 12 days.

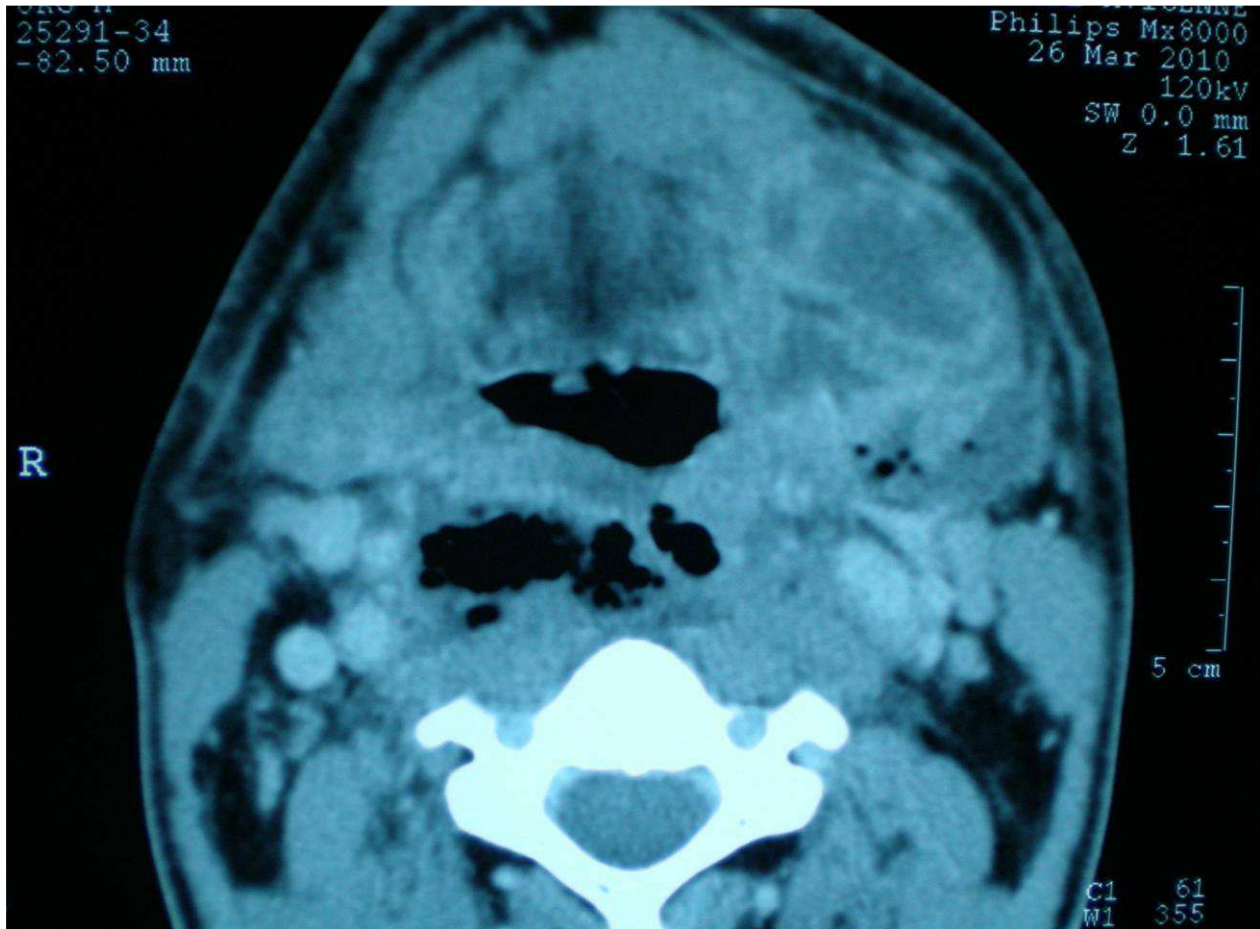


Figure 1: Axial CT cervical runs showing an abscess collection laterocervical left with water-scarce bubbles retro pharyngeal.

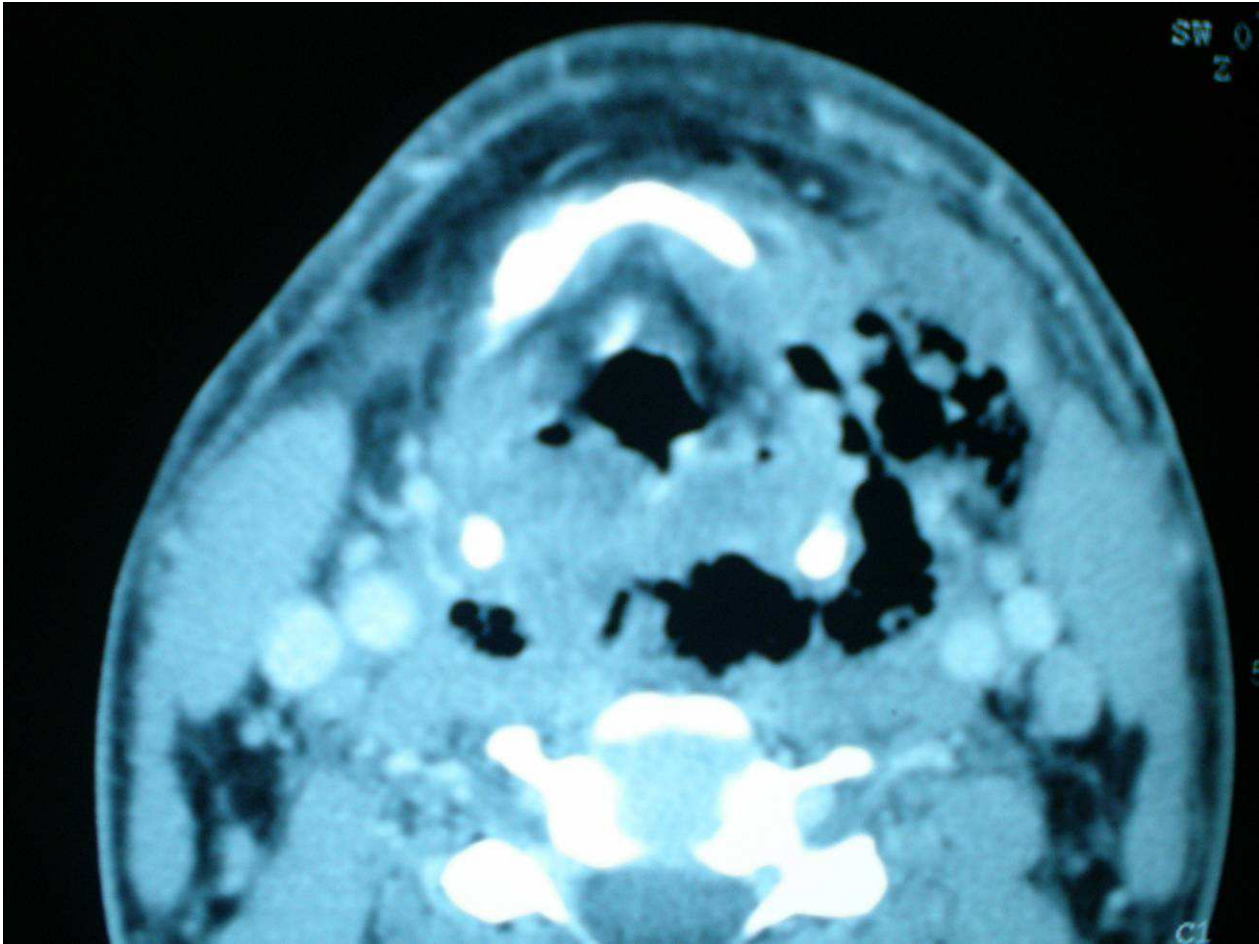


Figure 2: cervical CT axial slices cut in CT showing the spread of infection and latero retopharyngé Spaces.

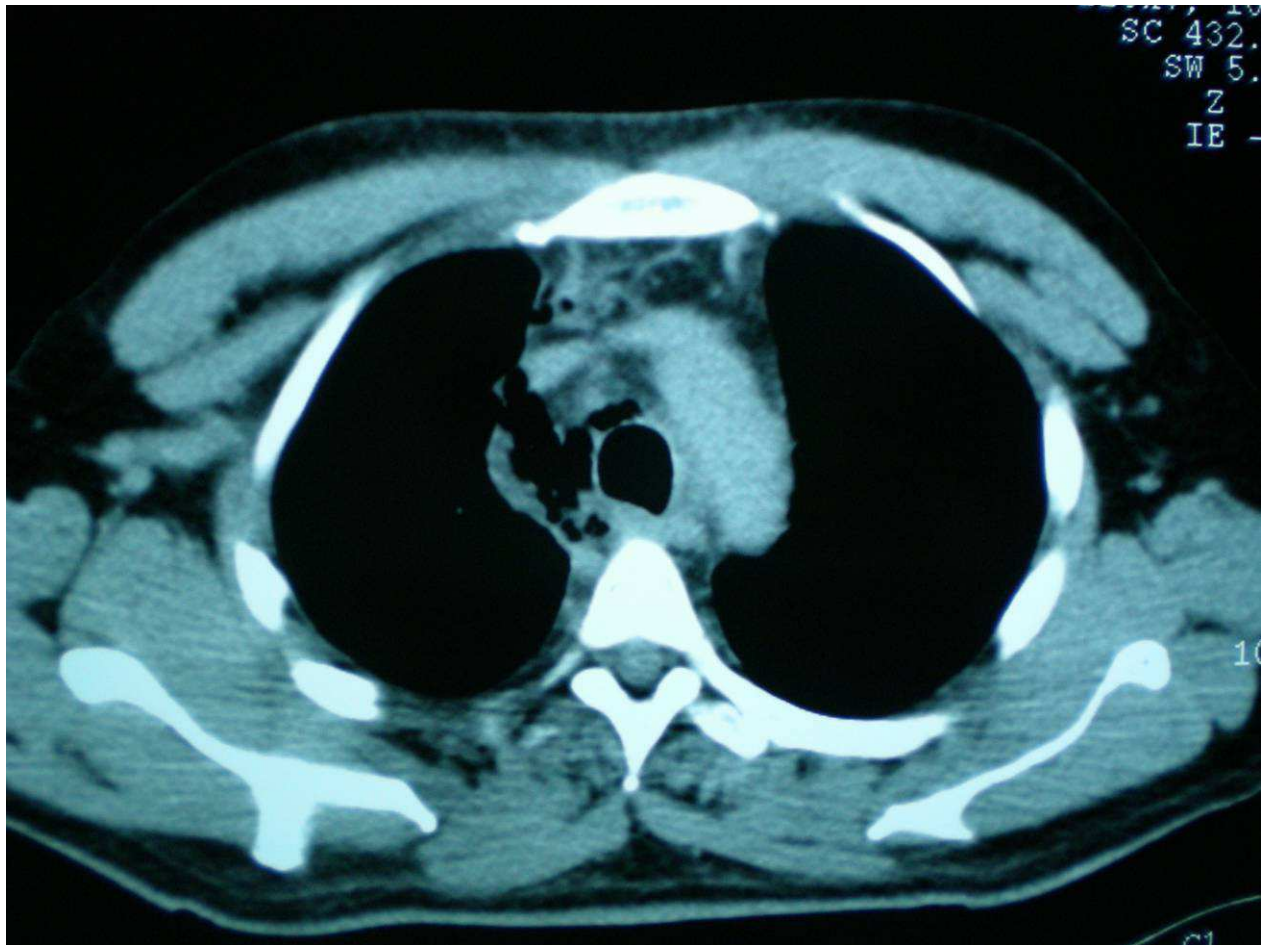


Figure 3: chest CT axial sections showing a mediastinal retro cellulite and laterotrachèale right.

RESULT AND DISCUSSION

The cervicofacial cellulitis are relatively rare, but their poor prognosis reflects the interest of this observation. CCF is a so-called contiguity infection, usually secondary to transmucosal contamination, which is mainly input lanPorte dental [2,3], but the origin may also be parotid, subcutaneous or even mandibular pharyngeal [2,4]. Many contributing factors are reported, including diabetes, HIV infection, alcoholism and immunosuppression and the over-prescription of anti-inflammatory [5]. Local signs are often less important than lessignes general. This discrepancy can be misleading source of delay in diagnosis and a more unfavorable developments, the pain is usually intense, necrosis is an important sign, often limited TO cyanate few spots, cold and hypoaesthetic sometimes it is evident with further snow crackles. [4] The elements of a severe sepsis are present in varying degrees: confusion, hypotension, oliguria, hypothermia, hypoxemia etThrombopénie [5-6].

The CCF is a polymicrobial infection, tissue necrosis aéroanaérobie with that first touches the least vascularized tissue (fascia), before étendrenaux muscles and fat. The species in question are mainly streptococci, anaerobes, Enterobacteriaceae, Staphylococcus aureus and

enterococci. The b-hemolytic streptococcus group A (*Streptococcus pyogenes*) is frequently isole' [3-6]. A plurimicrobienne association is demonstrated in 40 TO 90% fasciitis necrotizing. The propagation is performed using various routes. Thus, the extension to the cervical level is direct,

step by step. The spread to the mediastinum is a pejorative milestone in the evolution of the disease. Indeed its occurrence is subject to a heavy mortality. The mediastinal involvement may be TO across three areas: rétroviscéral, vascular gutter pretracheal space [2,5].

The radiological assessment is based on the head and neck CT with mediastinal Cysts will confirm the diagnosis [6]. Laboratory tests will especially appreciate the overall impact of the disease. When drainage is performed, the bacteriological study is required and to guide antibiotic therapy. The management of medico-surgical and cervicomédiastinales cellulite is based on three priorities [2-5]:

- Resuscitation in an intensive care unit with monitoring of hemodynamic and respiratory condition, the treatment is that of a severe sepsis.

-l'antibiothérapie appropriée parentérale et started dès l'admission, and is effective in streptococcal and referred to anaerobic germs

Rule susceptible to penicillin (amoxicillin - clavulanic acid).

initial surgical -l'intervention whose precocity is a decisive prognostic factor, it must meet several objectives: the opening of all the cel-fascial spaces, draining all collections, excision of all necrotic tissue and treatment of a possible gateway

CONCLUSION

Mediastinitis secondary to extension of head and neck cellulite remains a formidable complication and only one time without care and multidisciplinary offers hope a good prognosis. However, the best treatment is prevention.

REFERENCES

- [1] Conférence de consensus de la Société française de dermatologie (SFD) et de la Société de pathologie infectieuse de langue française (SPILF). érysipèle et fasciite nécrosante : prise en charge. Réanim Urgences ,2000, 9, 383-88.
- [2] Potard G, Marianowski R, Fortun C, et al. Cellulites de la face et du cou, à propos de 13 cas. *J F ORL* ,2000,49,325-37.
- [3] Vigne Ph, Duvillard Ch, Romanet Ph, Tung-yiu W, Jehn-Shyn H, Chinq-Hunq C, Hunq-An C. *J Oral Maxillofac Surg* ,2000,58(12),1347-52.
- [4] Bado F, Fleuridas G, Lockhard R, et al. Cellulites cervicales diffuses, à propos de 15 cas. *Rev Stomatol Chir Maxillofac* ,1997,98,266-8.
- [5] Feinerman L, Tan H, Roberson D, et al. Necrotizing fasciitis of the pharynx following adenotonsillectomy. *Int J Pediatr Otorhinolaryngol* ,1999,48,1-7.
- [6] Vigne Ph, Duvillard Ch, Romanet Ph. Les cellulites cervicales diffuses. A` propos de 5 observations. *Oto-Rhino-Laryngologia Nova* ,1999,9,245-51.