A 22-year-old woman with right lumpy jaw syndrome and fistula

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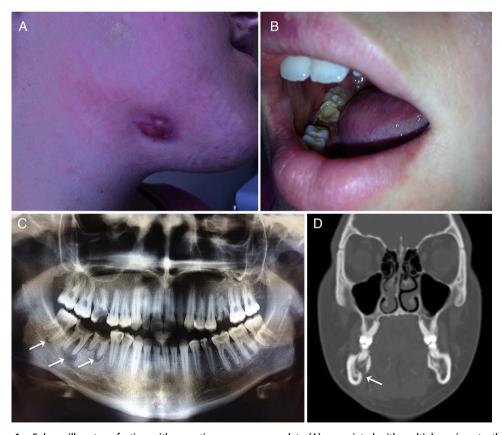
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DESCRIPTION

A 22-year-old woman attended the infectious diseases consultation for a 2-week history of painless afebrile submaxillary tumefaction with continuous serous exudate (figure 1A). Oral examination revealed multiple carious teeth (figure 1B). Panoramic dental radiography disclosed multiple periapical tooth abscesses (figure 1C, arrows). CT scan highlighted signs of chronic osteomyelitis of the lower mandible (figure 1D, arrows). Although actinomycosis was not proven, a regimen of amoxicillin (6 g/day) and clindamycin (1800 mg/day) was initiated, associated to dental avulsion, providing rapid improvement of symptoms.

Lumpy jaw syndrome is well known by veterinarians, as it is frequent in cattle, swine, horses and dogs. It consists of a large unilateral abscess

that grows on the head and neck of the infected animal, following dental disease and mandibular osteomyelitis. In humans, this syndrome is particularly associated with poor dental hygiene, periodontal disease and periapical dental abscess.1 Lumpy jaw syndrome is mainly due to anaerobic polymicrobial infection, including Actinomyces spp (filamentous Gram-positive bacilli belonging to the human commensal flora).² Lumpy jaw syndrome is the most frequent clinical form of actinomycosis and can be associated with fistula, as in the our case. Treatment of dental disease (mainly dental avulsion) is essential, and antimicrobial therapy with high-dose amoxicillin is the treatment of choice. Association of a companion such as clavulanate or clindamycin is controversial, but may help target copathogens. 1 3





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Figure 1 Submaxillary tumefaction with a continuous serous exudate (A), associated with multiple carious teeth (B), multiple periapical tooth abscesses (dental panoramic radiograph, (C), arrows) and chronic osteomyelitis of the lower mandible (CT scan, (D), arrows).

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Learning points

- ► Lumpy jaw syndrome associates unilateral head and neck abscess, mandibular osteomyelitis and dental infection.
- Actinomyces spp are the main oropharyngeal commensals involved in lumpy jaw syndrome.
- Dental avulsion and high doses of amoxicillin are usually the treatment of choice.

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REFERENCES

- 1 Lerner PI. The lumpy jaw. Cervicofacial actinomycosis. *Infect Dis Clin North Am* 1988;2:203–20.
- Valour F, Sénéchal A, Dupieux C, et al. Actinomycosis: etiology, clinical features, diagnosis, treatment and management. *Infect Drug Resist* 2014:183–97.
- Oostman O, Smego RA. Cervicofacial actinomycosis: diagnosis and management. *Curr Infect Dis Rep* 2005;7:170–4.

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