CASE STUDY

Eikenella corrodens: A Rare Cause of Deep Neck Infection

Infección cervical profunda causada por Eikenella corrodens

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Case Study

Female, 22 years old, presenting swelling with inflammatory characteristics in the supra-hyoid region. Approximately 2 months earlier, the patient had been diagnosed as having a left peri-amygdaline abscess, with spontaneous drainage of purulent content. She did not present any other relevant medical or surgical history.

On questioning, the patient did not report any dyspnoea, dysphonia, dysphagia, coughing nor any other symptom in the otorhinolaryngological area.

During the physical examination, a hard mass with imprecise limits was observed in the supra-hyoid region. The examination of the oral and oropharyngeal cavity did not reveal any significant findings. No cervical adenopathies were palpated.

In view of the clinical suspicion of an infectious or inflammatory process, the patient was treated empirically with amoxicillin and zx clavulanic acid, without improvement and with a gradual increase in the size of the lesion.

Magnetic resonance imaging (MRI) revealed a soft tissue mass measuring 4cm in diameter that imprecisely distorted the soft planes of the supra-hyoid region and extended into the sub-mandibular and sub-lingual spaces. Following administration of contrast, homogeneous highlighting of the entire area could be appreciated without any capsule being defined (Figs. 1 and 2).

The FNB of the mass was reported as an inflammatory lesion with neutrophils and macrophages. Isolated groups

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of zx non-ciliate columnar cells were observed to present reactive atypia.

In view of the poor evolution despite medical treatment, it was decided to perform an exploratory cervicotomy, during which a non-infiltrative supra-hyoid swelling was found on the surface of the zx milo-hyoid muscle, and had a necrotic centre. The cavity was opened and its entire content drained.

The histopathological study revealed the presence of non-specific chronic inflammation of soft tissue, with the presence of abundant capillary vascularization, oedema and plasmatic cells with abundant macrophages, without granulomas or signs of malignancy.

The culture identified the presence of β-lactamase sensitive Eikenella corrodens (E. corrodens). The mycobacterial culture was negative.

The patient was treated with zx cefditoren-pivoxil 400 mg every 24 h for 10 days, with good progress and resolution of the cervical lesion.

Discussion

E. corrodens is a zx opportunistic facultative? Gram-negative anaerobic zx coclobacillus, that only grows with difficulty. It is habitually found in the oral, gastro intestinal and genito-urinary flora. Its role as a pathogenic agent has been increasingly recognized as it is a causal agent for a wide variety of infections. It acts as an opportunistic pathogen in both immune-compromised and immune-competent patients. As its culture, isolation and identification may be complex, suspected diagnoses and a meticulous microbiological study are important.

In the head and neck area, E. corrodens generally affects zx immune-competent individuals, and its focus is the oral and oropharyngeal cavity. In the amygdaline region, it may be located in deep zx crypts, thus hindering the taking of samples. It is normally found in polymicrobial infections, where Streptococcus and Staphylococcus can increase its pathogenicity. In adolescents and under certain favourable conditions, E. corrodens may cause abscesses, disseminated infections and septic zx cuadros. The case reported here involved a young girl with a history of a peri-amygdaline abscess, which may have been the cause of the zx cuadro.

Treatment is based on the use of antibiotics and also surgery in the vast majority of cases. Despite being a bacterium that resides in the oropharynx, it is resistant to habitually used drugs such as clindamycin, metronidazole and penicillinase-resistant penicillins. It is sensitive to benzylpenicillins, third-generation cefalosporins, amoxicillin and clavulanic acid, cotrimoxazole and fluorokinolones, and presents relative resistance to aminoglycosides and erythromycin. The treatment of choice involves third-generation cefalosporins, the new fluorokinolones or zx carbapenems.

The surgical drainage of the purulent content is fundamental to achieve a favourable outcome. In the study reported by Paul and Patel, 90% of the cases identified required one or more zx interventions to bring the infection under control, even in cases with correctly prescribed antibiotics.

In conclusion, E. corrodens can cause infections in the head and neck area of immunocompetent patients. The amygdaline area is the most frequent origin. Clinical zx suspicion and adequate culture are fundamental for its diagnosis. Third-generation zx cefalosporins and surgical drainage where necessary constitute the treatment of choice.

References