Orbital complication of a paranasal sinus actinomycosis

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ABSTRACT

Actinomycosis of the paranasal sinuses is very rare. The maxillary sinus is the most frequently sinus involved, the infection arises in most of the cases from the oral cavity following dental procedures or trauma, and no orbital complications of the paranasal sinus infection were previously described.

We present the first reported case of paranasal sinus actinomycosis associated with an orbital complication. We describe other unusual features of the case: the occurrence of the infection in an pregnant patient, the involvement of the ethmoid sinus, the safety of a surgical treatment in a 15 week pregnant patient.

INTRODUCTION

Actinomycosis of the paranasal sinuses is very rare. The maxillary sinus is the most frequently sinus involved, the infection arises in most of the cases from the oral cavity following dental procedures or trauma, and no orbital complications of the paranasal sinus infection were previously described.

RESULTS

A 25-year-old female, 15 week pregnant with no history of otorhinaolaryngologic or sinus diseases, was admitted for treatment of a complex sinusitis presenting with rhinorrhea.

METHODS AND MATERIALS

On admission she had complete left eye closure, diminished eye movement when looking up but no visual impairment, and atroscopy no punctate discharge was seen. On current investigation, magnetic resonance imaging (MRI) 1 showed a large medial and superior to the ethmoid sinus abscess and a preseptal abscess complicating a left ethmoid sinusitis.

Intravenous antibiotic therapy with amoxicillin and clavulanic acid were immediately started, and she was taken to the operating room for surgical drainage under general anaesthesia. Before the operation, risks for the patient and for the fetus were discussed and informed consent was obtained for the anaesthetic and surgical procedures.

During general anaesthesia propofol, remifentanil, sufentanil a curcurin were the drugs used. No complications arose from their use.

A combined external and transeptal endoscopic approach was performed to drain the abscesses and the sinus infection (SURG 1; green lines highlight the external incisions). Post surgery for culture revealed Actinomyces meyeri sensitive to the empiric antibiotics.

CONCLUSIONS

This is the first reported case of paranasal sinus actinomycosis associated with an orbital complication. Other unusual features of the case were the predominant involvement of the ethmoid sinus, the occurrence of the infection in an immmunocompetent pregnant patient, the need to obtain the diagnosis without a computed tomography and safety of the anaesthetic and surgical procedures in the 15 week pregnant patient.

REFERENCES