**Orbital Cellulitis of Odontogenic Origin: A Case Report**

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Odontogenic infections can usually be managed with the elimination of the causative factor and the prescription of antibiotics. If these infections are not promptly intercepted, they may follow an aggressive course and spread beyond the mandible and maxilla to deeper spaces in the head and neck. In these instances, a multidisciplinary approach will be required.

A 33-year-old male presented to the Tufts Medical Center Emergency Department (ED) with pain in his left face associated with an upper tooth. The patient was prescribed a course of pharmacotherapy consisting of Augmentin and Peridex and discharged. The patient returned with left periorbital swelling, and the Oral and Maxillofacial Surgery (OMFS) and Ophthalmology departments were consulted. Imaging revealed an infection arising from tooth #15 that infiltrated the maxillary sinus and continued through the medial wall of the orbit, resulting in orbital and periorbital cellulitis. The intraocular pressure (IOP) was severely elevated, and the patient was emergently taken to the operating room (OR) for extraction of tooth #15 and drainage of the maxillary sinus and orbit via functional endoscopic approach. The patient’s IOP dropped post-operation and he was admitted under the OMFS team for intravenous (IV) antibiotic therapy and continued monitoring. On post-op day (POD) 1, the patient’s periorbital edema decreased, and the Infectious Disease department (ID) was consulted. On POD 2, his periorbital edema and IOP increased, and his vision deteriorated. The patient was taken back into the OR to drain a lateral orbital abscess with drain placement. The patient’s IOP and edema decreased the next day, and the cultures speciated *S. constellatus*. He was started on 4-6 weeks of IV antibiotics. His IOP continued to decrease, vision improved, and the inferior orbital drain was removed. The patient was discharged after a 1-week course in the hospital.

Deep fascial space infections of odontogenic origin have historically been managed with a combination of antibiotics, medical optimization, and surgery; with surgery being of paramount importance in the resolution of the disease. This case demonstrates that prescribing antibiotics is often not enough to treat an infection of this magnitude. Source control is necessary for preventing the spread of infection.