

Orbital cellulitis complicating extensive sinusitis: a case report

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ABSTRACT

Orbital cellulitis is the infection of soft tissues extending beyond the orbital septum. It exhibits preponderance toward children and demonstrates varying severity, including sight and life-threatening complications. We report a case of a teenager with orbital cellulitis complicating extensive sinusitis. A 14-year-old boy with allergic rhinitis presented with rapidly increasing left eyelid swelling, redness and pain of one day duration. This was preceded with fever, cough and runny nose of 3 days. No drop in vision. No toothache, eye trauma or insect bite. Left eye was proptosed, mildly chemosed with restricted and painful extraocular movement. Optic nerve function test was normal bilaterally. Left eye intraocular pressure was 22 mmHg. Right eye anterior segment was unremarkable. Fundi examination were unremarkable. A provisional diagnosis of left orbital cellulitis was made. Urgent contrast-enhanced computed tomography showed features of orbital cellulitis with subperiosteal abscess and opacification of left paranasal sinuses. Intravenous empirical broad-spectrum antibiotic was immediately initiated and the Otorhinolaryngology team roped in for co-management. Due to clinical deterioration, endoscopic endonasal sinus surgery and pus drainage was performed by the otorhinolaryngologist. Pus culture revealed *Staphylococcus aureus* and *Staphylococcus lugdunensis*. Upon completion of treatment, there was resolution of pain, proptosis and chemosis. Extraocular movements were full and free. Intraocular pressure returned to normal. High index of suspicion and initiation of empirical broad-spectrum antibiotics, with or without surgical intervention and management of underlying cause is pertinent to ensure favourable outcome. Multi-disciplinary approach is also often required in the management of orbital cellulitis.