

IMAGES IN EMERGENCY MEDICINE

Infectious Disease



Left Ptosis and Binocular Diplopia After Tooth Extraction

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1 CASE PRESENTATION

A 54-year-old man presented with left ptosis, binocular diplopia, and left facial swelling 5 days after left upper molar extraction (Fig 1). He had normal visual acuity and pupil size in both eyes. Mild limitation in the infra-duction of his left eye was also noted. Computed tomography and magnetic resonance imaging scans were performed (Fig 2A,B).

2 DIAGNOSIS

2.1 Odontogenic Deep Neck Infection With Left Orbital Subperiosteal Abscess

Odontogenic deep neck infections with orbital involvement are rare, typically spreading via the maxillary or ethmoid sinuses.^{1,2} In this case, the infection bypassed these routes, extending from the masticator space to the

temporal region and orbit through a bony defect in the temporal area, a highly unusual pathway.³ The patient presented with left facial swelling and tenderness, likely caused by the odontogenic infection. Computed tomography and magnetic resonance imaging revealed a masticator abscess extending to the left orbital lateral wall. This uncommon route highlights the complexity of craniofacial infections.

Orbital involvement and periorbital invasion were evidenced by restricted extraocular muscle movement, suggesting neurologic implications. Urgent surgical intervention, including masticator space debridement and lateral canthotomy with cantholysis, was vital to prevent complications such as orbital cellulitis, abscesses, and potential visual loss.⁴ This case underscores a rare but significant complication of a dental procedure, illustrating the unique anatomical spread of infection to the orbit. It highlights the diagnostic challenges of

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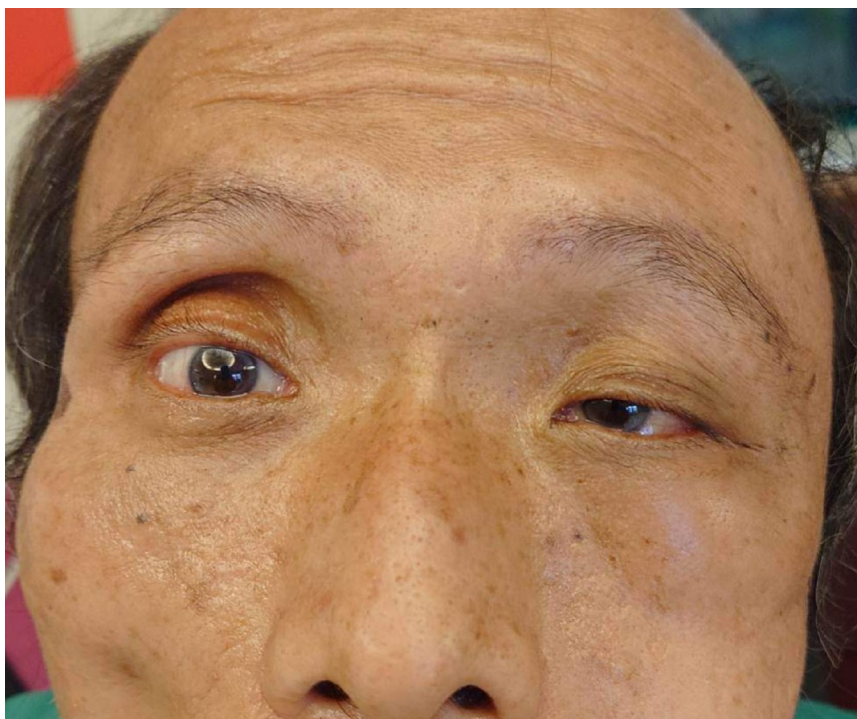


FIGURE 1. Color photograph showing left facial swelling and ptosis.

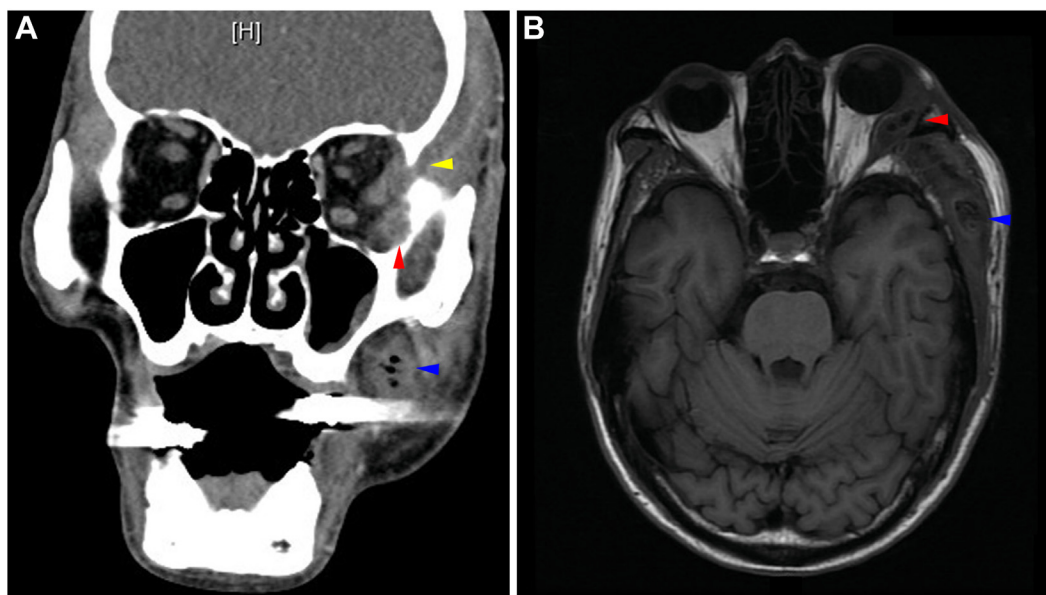


FIGURE 2. (A) Coronal view of computed tomography with contrast and (B) axial view of magnetic resonance imaging T1 weighted image demonstrating a defect in the left lateral orbital wall (yellow arrowhead), cystic lesion over the lateral rectus muscle (red arrowhead), and cystic lesions over the left masticator and temporal area (blue arrowhead).

craniofacial infections that traverse multiple planes, mimicking primary neurologic deficits, and emphasizes the importance of prompt diagnosis and intervention to prevent severe outcomes.

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CONFLICT OF INTEREST

All authors have affirmed they have no conflicts of interest to declare.

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