

Medical Imagery

Acute Dacryocystitis Complicated with Preseptal Cellulitis in Elderly

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A 65-year-old female with medical history of diabetes mellitus, presented to the emergency department with left eyelid swelling for 2 days (Fig. 1A). Physical examination revealed tenderness and erythema over the left lower eyelid and medial canthus with purulent discharge. No fever was detected. Ophthalmologic evaluation revealed visual acuity of 20/20, normal extraocular movement, clear anterior chamber, and isocoric pupils. Computed tomography (CT) of the orbit showed acute dacryocystitis with preseptal cellulitis and abscess formation of left eye (Fig. 1B, C). Pus culture grew *Klebsiella pneumoniae* and *Staphylococcus epidermidis*. Patient was hospitalized for intravenous antibiotics with ceftriaxone and topical ointment. Preseptal drainage was suggested but patient preferred medical treatment. She was discharged after completing the whole course of medical treatment without any sequelae.

Acute episodes of dacryocystitis commonly occur in elderly patients with chronic dacryocystitis due to nasolacrimal duct obstruction. Complications include dacryocystocele formation, chronic conjunctivitis, and spread to adjacent structures (orbital or facial cellulitis).¹ Acute dacryocystitis can commonly cause preseptal cellulitis but is rarely associated with orbital cellulitis. Patients with orbital cellulitis typically have optic nerve compromise even after systemic antibiotics and surgical treatment.² Orbital CT is a useful tool to differentiate orbital from preseptal infection. If preseptal abscess is present, incision and drainage is recommended in an attempt to prevent rupture of the lacrimal sac and posterior extension into the orbit causing optic nerve disruption. Dacryocystorhinostomy provides the definitive treatment.^{3,4}

Declaration of conflicting interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethical adherence

The study procedures were in accordance with ethical standards.

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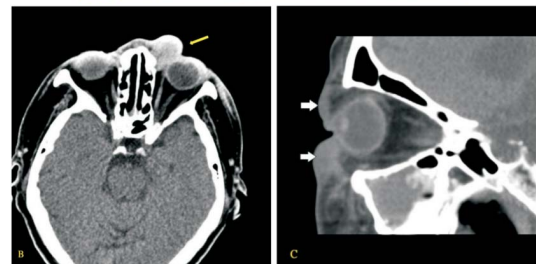


Fig. 1. (A) Severe swelling of the medial canthus, left upper and lower eyelids with purulent discharge. (B) Axial CT showing dilatation of lacrimal sac with abscess formation at the medial canthus of left eye (arrow). (C) Sagittal CT showing abscess accumulation at medial parts of superior and inferior lacrimal canaliculi (arrows). Postseptal tissue was spared.

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