

## **DACRYOCYSTITIS**

The lacrimal excretory system is prone to infection and inflammation for various reasons. This mucous membrane-lined tract is contiguous with 2 surfaces (conjunctival and nasal mucosal) that are normally colonized with bacteria. The functional purpose of the lacrimal excretory system is to drain tears from the eye into the nasal cavity. Stagnation of tears in a pathologically closed lacrimal drainage system can result in dacryocystitis.

Acquired dacryocystitis can be acute or chronic. Acute dacryocystitis is heralded by the sudden onset of pain and redness in the medial canthal region. An insidious onset of epiphora is characteristic of chronic inflammation or infection of the lacrimal sac.

Acute dacryocystitis.

A special form of inflammation of the lacrimal sac is that of congenital dacryocystitis, the pathophysiology of which is intimately related to the lacrimal excretory system embryogenesis.

Dacryocystitis has long been noted to occur more frequently on the left side than on the right side. In many instances, the nasolacrimal duct and lacrimal fossa formed a greater angle on the right side than on the left side

## **TREATMENT**

The treatment of dacryocystitis depends upon the clinical manifestations of the disease.

Acute with orbital cellulitis

- Acute dacryocystitis with orbital cellulitis necessitates hospitalization with intravenous (IV) antibiotics.
- Appropriate neuroimaging studies should be obtained, and surgical exploration and drainage should be performed for focal collections of pus.
- IV empiric antimicrobial therapy for penicillin-resistant Staphylococcus (nafcillin or cloxacillin) should be initiated immediately.
- Blood cultures and cultures of the lacrimal secretions should be obtained prior to antibiotic therapy.
- Treatment with warm compresses may aid in resolution of the disease.
- Impending perforation should be treated with a stab incision of the skin.

Acute without orbital cellulitis

- Purulent infection of the lacrimal sac and skin should be treated similarly. Hospitalization is not mandatory unless the patient's condition appears serious.
- Treatment with oral antibiotics (eg, Augmentin) is appropriate.
- Cultures of the lacrimal fluid should be obtained. The presence of a lacrimal sac mucocele in adults mandates treatment even if asymptomatic.
- The treatment of choice is a dacryocystorhinostomy whether the patient is symptomatic or not. Probing should not be performed because mucoceles often are not sterile and probing may incite a cellulitis.

## Chronic

- Patients with chronic dacryocystitis caused by a partial or intermittent nasolacrimal duct obstruction may benefit from topical steroid drop treatment.
- Congenital chronic dacryocystitis may resolve with lacrimal sac massage, warm compresses, and topical and/or oral antibiotics.