Diverticulum of the lacrimal sac associated with rhinosporidiosis

M MATHEW KRISHNAN, V K KAWATRA, V A RAO, AND C RATNAKAR
From the Department of Ophthalmology, Jawaharlal Institute of Postgraduate, Medical Education and Research, Pondicherry-605006, India

SUMMARY A rare case of diverticulum of the lacrimal sac associated with rhinosporidiosis is reported. The clinical presentation and possible pathogenesis are discussed.

Diverticulum of the lacrimal sac of sufficient size to cause clinical symptoms is rare.1 It may be of congenital, inflammatory, or traumatic origin. Mycotic dacyrocystitis due to rhinosporidiosis has been noted.2 Blastomycosis of the nasolacrimal duct associated with diverticulum of the lacrimal sac has been observed.3 In the present case diverticulum of the lacrimal sac associated with rhinosporidiosis is being reported.

Case report
A South Indian female aged 19 years was admitted to the Department of Ophthalmology on 28 December 1984 complaining of a swelling at the right inner canthus of three years' duration. The swelling was gradually increasing along the right lower lid. There had been epiphora with occasional blood stained discharge for the past three months.

On examination there was a soft swelling extending from the medial canthus to the medial two-thirds of right lower orbital margin (Fig. 1). It was painless, and the surface was smooth and slippery, adherent to neither overlying skin nor underlying bone. On pressure a serosanguineous discharge came through both puncta, resulting in shrinkage of the swelling. The left eye showed no abnormality. The ears, nose, and throat were normal.

Syringing the right lacrimal passages after evacuating the discharge resulted in a tense cystic swelling with excruciating pain. The left nasolacrimal duct was patent. Dacyrocystography with propylidione (Dionosil) dye showed a diverticulum of the lacrimal sac and dye did not appear in the nose after 30 minutes (Fig. 2).

A diagnosis of diverticulum of the lacrimal sac was...
made, and both diverticulum and sac were excised. Histopathological examination showed thick double walled trophocytes and sporangia of *Rhinosporidium seeberi* in the fibrous tissue of the sac and diverticulum (Fig. 3). Rupture of some of the sporangia had resulted in the release of spores into the wall, producing a giant cell reaction. In addition the sections showed lymphocytic and plasma cell infiltration.

**Discussion**

Rhinopsporidiosis is a fungal infection caused by *Rhinosporidium seeberi*. Oculosporidiosis involves the lacrimal sac in 24% of cases, and a history of bleeding from the nose is often given. In the present case probably the following sequence of events occurred. There may have been a symptomless congenital diverticulum of the lacrimal sac with patency of passages. Rhinosporidiosis of the lacrimal passages caused intermittent obstruction by chronic inflammation and venous engorgement, resulting in retention of secretion, which presented clinically as an obvious swelling, epiphora, and blood stained discharge.

**References**


Accepted for publication 11 February 1986.