Ocular rhinosporidiosis

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To the Editor: We report on patients with ocular rhinosporidiosis who attended the eye clinic at Umtata General Hospital. No previous cases have been reported in the Xhosa-speaking population.

Conjunctival rhinosporidiosis is a rare infectious disease that typically occurs in young people. It was first described as a pathogen in humans a century ago.[1] The aetiological agent, *Rhinosporidium seeberi*, commonly produces granulomatous inflammation of the affected mucosa. Most reported ocular infections have occurred in hot, dry climatic regions.[2] The diagnosis is usually made by biopsy and treatment is by surgical excision. In South Africa cases have been reported from KwaZulu-Natal.[3,4]

Material and methods

We reviewed medical records from January 1997 to December 2003 of patients treated at the eye clinic at Umtata General Hospital with histopathological confirmation of rhinosporidiosis. Six patients with rhinosporidiosis were identified during this period.

All our patients were of Xhosa origin. Three males and 3 females were affected. All were under the age of 15 years; 1 was below the age of 5 years, 4 were between the ages 5 and 10 years, and 1 was above the age of 10 years.

All patients presented with muco-purulent discharge from the affected eyes and most also presented with a conjunctival polypoid mass. One patient showed conjunctival chemosis and 1 presented with bleeding from the affected eye. No associated nasal affection was seen in these patients. In keeping with findings elsewhere, none of the cases was diagnosed clinically as rhinosporidiosis.[5]

These lesions did not respond to antibiotic and anti-inflammatory treatment. All were treated by surgical excision, following which there were no recurrences and the patients were asymptomatic.

In all our patients there was conjunctival localisation, with typically chronic non-granulomatous inflammation. Histologically all stages of the organism's life cycle could be found in the excised tissue, from small trophocytes to large sporangia-containing sporoblasts[6] (Fig. 1).

Discussion

The conjunctival lesion of rhinosporidiosis was first described in India in 1912.[7] It is endemic in India, Sri Lanka and parts of East Africa and South America and is caused by *R. seeberi*, an endosporulating micro-organism.[8] Although conjunctival rhinosporidiosis is an infectious disease rarely recorded outside

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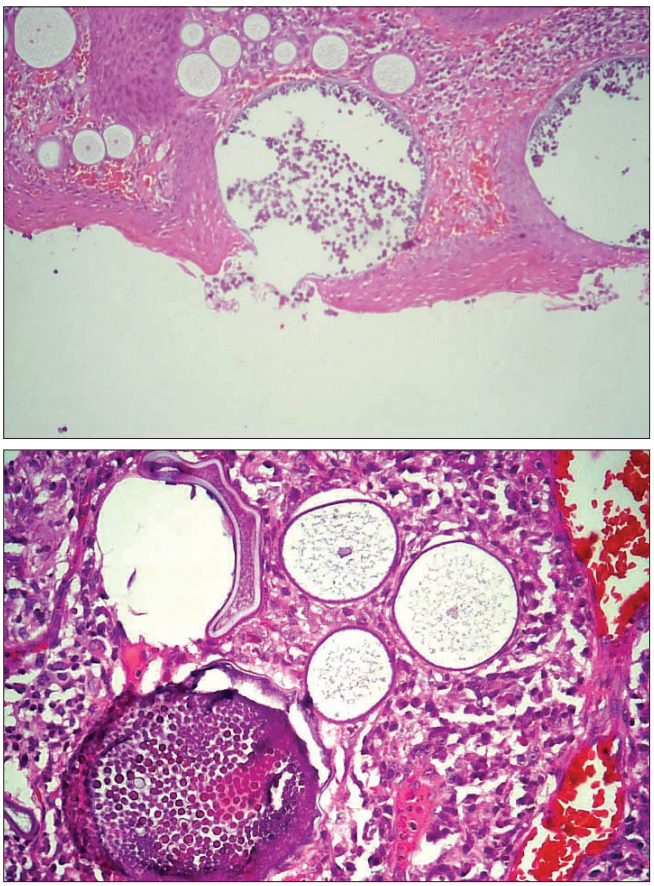

Fig. 1, above and below. All stages of the organism's life cycle can be seen in the excised tissue, from small trophocytes to large sporangia-containing sporoblasts.

the Indian subcontinent, it is seen on the African continent mainly in Malawi, Kenya, Uganda and Congo.[9] Increased migration to the West of persons who acquired rhinosporidiosis in their native Asian countries has resulted in increasing occurrence of this disease in the West.[10]

Varying male-to-female ratios have been reported.[11-13]

No other family members were involved among our patients and no transmission between members of the same family has ever been documented. The presumed mode of infection from the natural aquatic habitat of *R. seeberi* is through the traumatised epithelium, most commonly via nasal sites, but also via the external urethral meatus, the conjunctiva or the skin.[14]

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