

## CASE NOTES

# OCULAR RHINOSPORIDIOSIS SIMULATING A TUMOUR\*

BY

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RHINOSPORIDIOSIS is generally a local inflammatory condition of the anterior nares, and it was thought that other parts of the body enjoyed freedom from this infection, until in 1909 Kirkpatrick, cited by Tirumurti (1914) and by Purandare and Deoras (1953), reported a case of rhinosporidiosis of the conjunctiva. Elles (1941) reviewed 25 cases of ocular rhinosporidiosis reported in the literature, in 22 of which the lesion occurred in the conjunctiva and in three in the lacrimal sac. In a series of sixty cases reported by Allen and Dave (1936), four occurred in the conjunctiva. Purandare and Deoras (1953) reported 100 cases of rhinosporidiosis in Bombay, the conjunctiva being affected in three cases and the lacrimal sac in two cases. The following case of ocular rhinosporidiosis is reported because of its unusual manifestation.

### Case Report

A man was admitted to the ophthalmic ward of the Medical College Hospital, Nagpur, with a large lobulated mass involving the whole of the right lower eyelid and to some extent hanging over the face. The mass measured roughly 8 cm. at its largest diameter and extended upwards so as entirely to cover the eyeball (Fig. 1). It was soft and doughy to the touch. The overlying skin was smooth, glistening, and stretched, but intact. The palpebral conjunctiva was normal. The cornea did not show any ulceration. Examination of the nose did not reveal any tumour mass. A piece was taken from the ocular mass and examined under the microscope.



FIG. 1.—Ocular mass involving whole of right lower eyelid and entirely covering the eyeball.

*Pathological Report.*—The skin showed acanthosis and pseudo-epitheliomatous hyperplasia. The dermis showed a large number of sporangia, varying from 50 to 300 microns in diameter (Fig. 2, opposite). The sporangium showed a double contoured chitinous envelope and contained a large number of spores. Some of the sporangia were seen in different stages of degeneration and some were empty. Several spores were seen lying free in the stroma. In some fields spores and empty envelopes of the sporangia were surrounded by dense inflammatory exudate and occasional foreign body giant cells (Fig. 3, opposite).

\* Received for publication September 24, 1957.

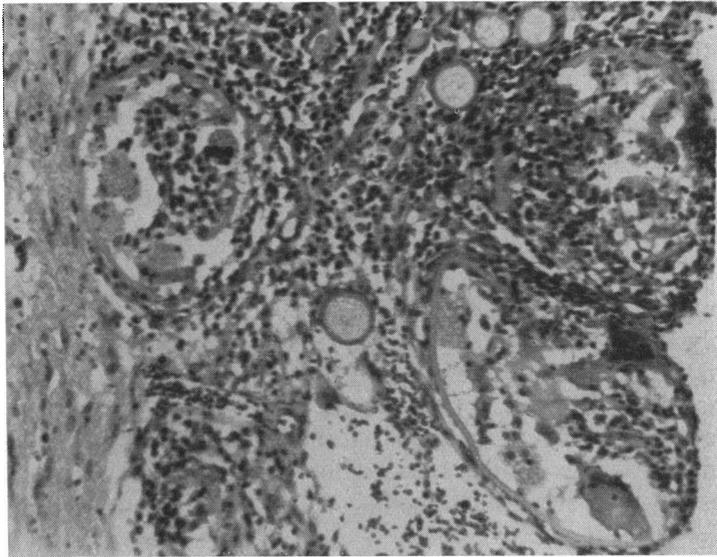


FIG. 2.—Photomicrograph showing sporangia in different stages of development. Haematoxylin and eosin, low-power magnification.

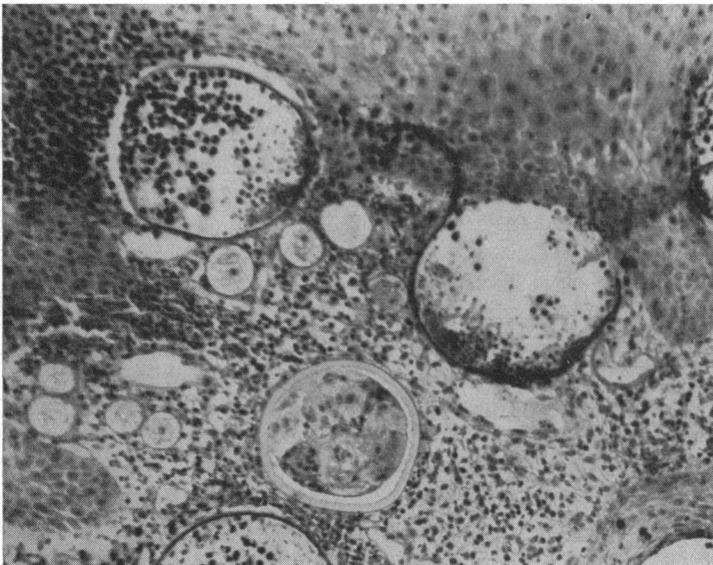


FIG. 3.—Photomicrograph showing spores and empty envelopes of sporangia surrounded by inflammatory exudate and foreign body giant cells. Haematoxylin and eosin, low-power magnification.

### Discussion

Rhinosporidiosis was first described by Seeber (1900, 1912), who is cited by Ashworth (1923) and by Ash and Raum (1956). The disease is endemic in India, Ceylon, and Cochin-China, and several cases have been reported from the United States. The causative organism was originally considered to be a protozoon, but Ashworth (1923) proved it to be a fungus, and it has since been known as *Rhinosporidium seeberi*. The method of transmission

of the fungus is not known; it is believed that infection is acquired in bathing pools, but the fact that the infection occurs exclusively in males throws considerable doubt on this hypothesis.

The fungus produces polypoidal, soft, friable masses in the nasal mucosa, but the conjunctiva is occasionally involved, and less frequently the ear, pharynx, larynx, and genitalia. In the present case, no lesion was detected in the nares, whereas a solitary lesion confined to the lower eyelid was found. There was no ulceration of the conjunctiva. The route of transmission in this case had probably been direct through an abrasion in the skin of the eyelid or through the palpebral conjunctiva, leaving no trace behind. The polypoid lesion of the eyelid very closely simulated a neoplasm. This case was presented at the combined staff conference and the clinical diagnosis was "lymphangioma of the eyelid", until biopsy revealed the true nature of the lesion. It is emphasized that, in dealing with the differential diagnosis of tumours of the eyelid, rhinosporidiosis should always be kept in mind as a possibility in India.

### Summary

A case is reported of ocular rhinosporidiosis simulating a neoplasm.

We wish to express our thanks to Dr. K. Chari, professor of ophthalmology, for the clinical data, and to Mr. Joshirao for the photograph.

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