CASE NOTES

RHINOSPORIDIOSIS OF THE CONJUNCTIVA*

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RHINOSPORIDIOSIS is an infection caused by a fungus, *Rhinosporidium seeberi*. The disease is characterized by the formation of small, friable, purplish-red granulomatous masses, occurring most often on the nasal membrane but also on other parts of the body. Conjunctival lesions are quite infrequent and the author is not aware of a previous case reported from South Africa.

Case Report

A male Bantu child, aged 10 years, was admitted to Edendale Hospital on February 24, 1958, complaining of a small mass that had appeared on the lower lid of the left eye. This had been present for one month and had gradually increased in size, but was not causing any pain. There was no history of injury or of any significant previous illnesses.

Examination.—The patient appeared to be in good general health. X-ray of the chest was normal. There was a discharge from the right ear due to a chronic otitis media. Culture of material from the ear showed *Staphylococcus pyogenes* (coagulase positive). Projecting from behind the middle of the margin of the left lower eyelid was a small, irregular, reddish tumour about the size of a pea (Fig. 1). The tumour was attached to the palpebral conjunctiva about 3 mm. below the lid margin by a broad stalk. The remainder of the conjunctival sac was normal.

FIG. 1.—Appearance of tumour.

Operation was performed on the day after admission. Handling of the tumour produced free bleeding. It was excised flush with the conjunctiva and the bed lightly cauterized.

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FIG. 2.—Low-power view of section showing sporangia.

FIG. 3.—Details of sporangia: thick wall and contained spores.

Histology.—The sporangia and spores typical of *Rhinosporidium seeberi* were contained in the excised tumour (Figs 2 and 3).

Follow-up.—After 2 months showed the eye to be normal in every respect.

Discussion

The organism causing rhinosporidiosis was first described by Seeber (1900), who described two cases with formation of polyps in the nose. The organism was then considered a coccidial parasite, but Ashworth (1932) demonstrated a similarity between the organism and rudimentary plants. At present it is regarded as a fungus and not a protozoon, but this still needs to be confirmed by culture.

Lesions due to this organism have been reported in man and in domestic animals such as cattle, horses, and mules. The organism found in the nasal

cavities of the horse in South Africa, *Rhinosporidium equi* (Stitt, Clough, and Branham, 1948), is probably closely related.

The mode of spread of the disease is uncertain. Direct transmission has not been proved, but contact with stagnant water has been suspected (Smith and five others, 1952).

The organism can be seen in histological preparations of the excised poly-poid masses as round, thick-walled sporangia, varying in size from 6 to 300 μ . The sporangia contain thousands of nucleated spores, 6 to 8 μ in diameter. Culture and animal inoculation have not been successful.

The lesions due to this organism have been reported most frequently in the nose, but also on the lips, fauces, pharynx and larynx (Desmond, 1953), bronchus (Thomas, Gopinath, and Betts, 1956), parotid (Mahadevian, 1955), penis (Tjokronegoro, Joe, and Eng, 1955), lacrimal sac, conjunctiva, ear, vagina (Smith and five others, 1952), and skin (Stitt and others, 1948).

The organism has been reported from many parts of the world; India (Desmond, 1943; Smith and others, 1948); Argentina (Stitt and others, 1952); Vietnam (Ferrard and Destombes, 1955); Belgian Congo (Thomas and others, 1956); Indonesia (Tjokronegoro and others, 1955); Turkey (Atav and others, 1955); Cochinchina, Uruguay, and the U.S.A. (Stitt and others, 1948).

Treatment by excision and cauterization of the stalk has generally been successful, but there is a distinct tendency to recur. It has been suggested that the systemic use of antimony preparations may be helpful (Smith and others, 1952).

Summary

A case of rhinosporidiosis of the conjunctiva is reported. The condition was successfully treated by excision and cauterization. The bacteriology and distribution of the disease is reviewed.

Permission to report this case was granted by Dr. J. Parker, Director of Medical Services, Natal. The patient was admitted under the care of Dr. R. J. H. McMahon, visiting ophthalmologist to the Edendale Hospital.

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