

CUTANEOUS RHINO SPORIDIOSIS

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Summary

Rhinosporidiosis is a disease caused by a fungus, *Rhinosporidium Seeberi*. The disease is endemic in this area. On an average 75 patients per year report in D. K. Hospital, Raipur, Madhya Pradesh. The commonest site of the lesion is nose. In 10% of the cases the lesion is in the ocular tissues. Skin is also sometimes involved. During the period 1967 to 1971 four cases of cutaneous sporidiosis were observed in this institution. The clinicopathological findings of these four cases are presented. Two cases were of satellite variety and the other two had generalized cutaneous dissemination.

Introduction

Rhinosporidiosis is a disease caused by *Rhinosporidium Seeberi*, which is regarded as a fungus (Ashworth, 1923). The disease is endemic in certain parts of India, Ceylon and South America. One of the endemic foci in India is Raipur District in Chhattisgarh region of Madhya Pradesh. Every year about seventy five cases are recorded in D.K. Hospital, Raipur, Madhya Pradesh (Gupta et al 1971). The disease mainly involves nasal cavity, sometimes conjunctiva and occasionally other sites like skin, viscera etc. This paper presents four cases of cutaneous sporidiosis observed in D. K. Hospital, Raipur in the last 5 years.

Observations

Case No. 1:— A twenty five years old female labourer of village Tongopani in District Raipur attended outpatients department on 11-9-71 with the complaints of swelling of the nose since one year, swelling below the eyes ten months, nodules over face six months,

difficulty in swallowing, hoarseness of voice, bleeding from the nose and nasal obstruction of one month duration. She had bilateral diffuse boggy swellings in both the lower eye lids, sixteen smooth and warty papules and nodules with mild erythema at the bases in certain lesions, on left side of the face (Fig. 1). Surface of these skin lesions was blackish. One of the lesions had ulcerated.



Fig. 1

Case No. 1 Female aged 25 years with satellite lesions on the face. Note the boggy swelling below eye due to involvement of lacrimal sac.

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Regional lymph nodes were not palpable. E. N. T. examination revealed a granular red mass occupying right nostril and anterior part of the left nostril having passed through a septal perforation. She had in addition polypoid masses hanging on the subglottis and from right tonsil region of Larynx. Clinical diagnosis was Rhinosporidiosis.

Case No. 2: A thirty years old male cultivator of the village Pauni in district Raipur was admitted in E. N. T. ward on 27—9—69 with the complaints of nasal obstruction due to mass in both nostrils and throat, eruptions over lips and difficulty in breathing of five months duration. He had seven smooth nodules and warty papules over the upper lip and tip of the nose (Fig. 2). The surface of these was blackish. Red granular growth was seen in left nostril and post nasal space. Clinical diagnosis was Rhinosporidiosis with satellite lesions on the face.

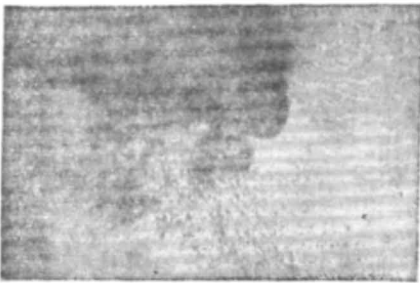


Fig. 2

Case No. 2 Male aged 30 years showing satellite lesions on the upper lip and tip of nose.

Case No. 3:—The patient was a forty years old male of Durg District. Skin biopsy with the clinical diagnosis of sarcoma was sent to the Pathology Department of Pt. J. N. M. Medical College, Raipur on 28—4—67. He had multiple subcutaneous nodules all over the body of four months duration. Certain lesions showed ulceration and bled to touch. Patient died in the village hence no autopsy could be done.

Case No. 4:—Twenty five years old male beggar of Raipur district was first seen on 21—1—71 in surgical outpatient department. He had few cauliflower like masses with black granular surface, over right hand, both legs and right gluteal region (Figs. 3 & 4) for the past two years. Lesions bled off and on. Clinical diagnosis was Epidermoid Carcinoma. Later examination revealed polypoid masses arising from the right nostril and soft palate.



Fig. 3

Case No. 4 Male aged 25 years showing lesions on right hand and both feet.

Histopathological examination in all the four cases showed a chronic non-specific inflammatory exudate with many sporangia. Majority of sporangia contained varying number of spores in different stages of development (Fig. 5). In case No. 3 Sporangia contained spores as many as 60–70 in which proteinaceous granules were present (Fig. 6).

Comments

The skin involvement is not uncommon in Rhinosporidiosis. From



Fig. 4

Case No. 4 showing cauliflower like mass in right gluteal region.

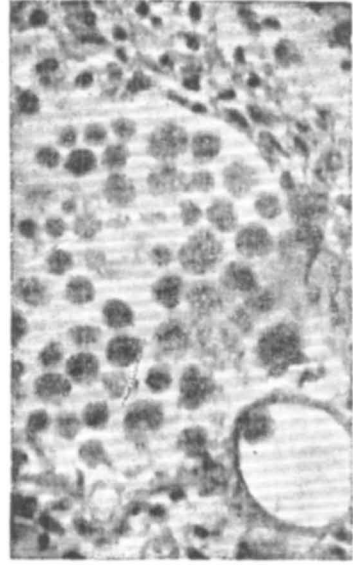


Fig. 6

Microphotogryaph showing large spores (in case 3) with Proteatinous granules

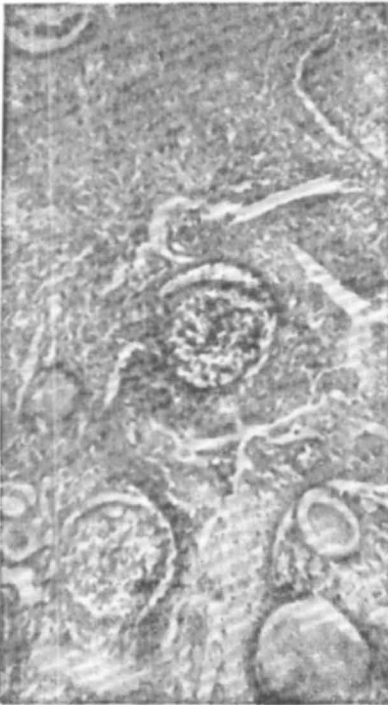


Fig. 5

Microphotograph showing Rhinosporidial sporangia in varying stages of development surrounded by chronic nonspecific inflammatory exudate. The epithelium is hyperplastic H & E.

the year 1967 to 1971 four cases of Cutaneous Sporidiosis were observed in D. K. Hospital, Raipur. The percentage of skin cases works out to be 1.1 as the total number of cases of Rhinosporidiosis in this period being 364. It is interesting to note that in the same area, Allen and Dave (1936) observed skin involvement in 5 cases (8.33%) in a series of sixty. As such there appears to be a decrease in the incidence of cutaneous sporidiosis in this area compared to the figures of Allen and Dave (loc. cit) although there is a rise in the total incidence of Rhinosporidiosis. This could possibly be attributed to the fact that patients of Rhinosporidiosis now seek medical advice and are operated upon relatively early.

The percentage of skin involvement as reported by other authors is as follows :—

Purandere	(1953)	1.0%
Henery	(1958)	2.6%
Cherian et al	(1949)	6.0%
Satyanarayan et al	(1960)	0.39%
Sharma et al	(1962)	3.5%

“Cutaneous Rhinosporidiosis can be classified into three types : 1. Satellite lesions : i.e. Primary lesion in the nasal cavity with involvement of the adjacent skin. 2. Generalised cutaneous lesions with or without nasal involvement. 3. Independent lesions.

Satellite lesions have been reported by Forcyth (1924), Allen et al (1936), Knowles (1928) quoted by Karunaratne (1964) and Lahri (1957-58). Generalised cutaneous lesions with involvement of nasal passage were recorded by Allen et al (1936), Desmond (1953), Rajam et al (1955), Swamy et al (1956) and Agrawal et al (1959). In Dhaygudes (1941) case nasal passages were free. The occurrence of independent lesions

have been recorded by Purandere (1953) Cherian et al (1949), Reddi, (1954) and Coutinho (1955).

Two of our cases (No. 1 & 2) were of satellite variety and the other two had generalised cutaneous dissemination. In one of our cases of generalized cutaneous dissemination there was involvement of nasal mucosa and in the other one it could not be verified.”

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