Rhinosporidiosis is a chronic granulomatous disorder caused by Rhinosporidium seeberi. It frequently involves the nasopharynx and occasionally affects the skin. We report a case of a 65-year-old man who had disseminated rhinosporidiosis with cutaneous involvement. The case presented with a reddish lesion over the nose of one year duration. In the last 6 months, he developed skin lesions over the right buttock. On examination a cutaneous lesion of rhinosporidiosis in form of verrucous polypoidal growth was observed over the right buttock. Which on histopathological study shows Rhinosporidiosis. On the basis of these clinical and histopathological findings, a diagnosis of nasal rhinosporidiosis with cutaneous dissemination was made.

Case report

A 65-year-old man presented with a 1-year history of a reddish polypoidal lesion in the nose. Over the past 6 months, he had developed skin lesions on the right buttock. He first noticed a reddish, friable lesion in the right nostril associated with anosmia, nasal block, occasional hemorrhage and crusting. He was a farmer by occupation and gave history of swimming in ponds in his village. On cutaneous examination, a solitary, oval reddish granulomatous growth (2 × 2 cm) was seen through the oropharynx [Figure 1]. A hemispherical unulcerated crusted nodule (4 × 3 cm) was seen over the right buttock [Figure 2]. On anterior rhinoscopy, reddish friable polyps studded with tiny white dots were seen in right nasal cavity. Oral cavity examination showed polypoidal growth extending from the nare. Fine needle aspiration cytology from the lesion on giemsa stain showed lobular thick-walled sporangia. Histopathological examination of the skin biopsy specimen from the representative cutaneous lesion confirmed the diagnosis and he was then referred to an otolaryngologist for endoscopic removal of the nasal lesions.

Operative procedure

An elliptical incision was given around the cutaneous lesion on buttock involving 1 cm of normal tissue from the margin. Wide local excision of the mass done. Subcutaneous tissue was closed by chromic catgut 2-0 and skin was closed. Specimen sent for histopathological study.

Discussion

Nasal rhinosporidiosis usually affects males (70.90%), and the incidence is greater in those aged between 15 and 40 years. The lesions are pink or purple-red friable polyps studded with minute white dots (strawberry like), which are sporangia containing the spores. Nasal obstruction and bleeding are the most common symptoms. The conjunctiva and lacrimal sac are involved in 15% of cases. Occasionally, rhinosporidiosis affects the lips, palate, uvula, maxillary antrum, epiglottis, larynx, trachea, bronchus, ear, scalp, vulva, vagina, penis, rectum, and the skin. Cutaneous lesions in rhinosporidiosis are not very common and usually start...
as friable papillomas that become pedunculated. Cutaneous rhinosporidiosis may also present as warty papules and nodules with whitish spots, crusting, and bleeding on the surface. Three types of skin lesions can occur: (1) satellite lesions, in which skin adjacent to the nasal rhinosporidiosis is involved secondarily; (2) generalized cutaneous type with or without nasal involvement, occurring through hematogenous dissemination of the organism; and (3) primary cutaneous type associated with direct inoculation of organisms on to the skin. The diagnosis can easily be clinched by performing a giemsa-stained imprint smear or fine-needle aspiration cytology from the lesion. Histopathology reveals enormous number of mycotic elements in the subepithelial connective tissue. These elements consist of sharply defined globular thickwalled cysts (sporangia), up to 0.5 mm in diameter, which contain numerous rounded endospores, 6.7 µ in diameter. Immature and collapsed sporangia are also present. The life cycle of the parasite is complicated. The mature forms of the organism, known as rhinosporidiosis, contain multiple sporangiospores. The trophocytes, the immature forms of R. seeberi, are smaller and thinner than sporangia and do not contain endospores. Sporangiospores are released at maturity and thereafter develop into trophocytes. It is possibly transmitted to humans by direct contact with spores through dust, through infected clothing or fingers, and through swimming in stagnant waters.

Surgical removal and electrosiccation are the treatments of choice. Dapsone may arrest the maturation of sporangia and accelerate degenerative changes in them. The effete organisms are then removed by an accelerated granulomatous response.

REFERENCES