A case report on ocular rhinosporidiosis

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Background :

Rhinosporidiosis is a chronic granulomatous infection of the mucous membranes (nasal, oral, ocular and rectal) caused by Rhinosporidium seeberi 1.This is an unusual unicellular pathogen that is difficult to culture and whose taxonomic classification hypothesized to be a prokaryote, an eukaryote or a fungus2. Ocular rhinosporidiosis affecting the conjunctiva was first described in India in 19123.The fungus was originally thought to affect the mucous membrane of the nares but it is now known that it may affect structures like ocular tissue, lips, skin, rectum, urethra, nasopharynx and larynx.

Case Report:

A 13 year old male patient from jagatsinghpur presented for irritation and foreign body sensation in right eye for 3 months. He belongs to low socio economic family. He gave history of regular bathing in a local pond. On examination a small fungating fleshy growth was felt in the inner aspect of upper eye lid of the right eye. Growth was about 9×6 mm, pink in colour. There was no ulceration and discharge. The growth was excised under local anaesthesia and sent for histopathological examination.

Investigation:

Routine blood investigations were within normal limits. His visual acuity was 6/6 in both eyes. Histological examination showed a large number of sporangia of variable diameters with double walled contours with a variable number of spores contained inside. The remaining tissue showed features of chronic inflammation, mixed inflammatory cells with lymphocytes.A histological diagnosis of ocular rhinosporidiosis was made.

Discussion:

Rhinosporidiosis is endemic in South India and eastern provinces in the deltas of big rivers. It is probably because of moist climate and poor hygienic conditions. Ocular involvement is an uncommon sequel constitutes approximately 5% incidence in rhinosporidiosis. In the eye, conjuctiva, lacrimal sac, eye lids and the sclera are the structures involved. The treatment is surgical excision with or without cautery at the base and recurrence is rare4. There is limited data on how it might be transmitted5. It is presumed to be acquired through traumatized nasal mucosa and spreads to other sites by autoinoculation. Ocular involvement occurs by spreading from the nose through the lacrimal sac to the plica of the conjunctiva. Following agents are effective in vivo: imidocarb diproprionate, diminazine aceturate, cycloserine, dapsone, trimethoprim-suphadiazine, ketoconazole, sodium stibogluconate, and amphotericin B6. Dapsone is the most commonly reported drug.

Conclusion:

Ocular rhinospridiosis though rare,but a curable disease that needs early diagnosis and treatment. However recurrences are not uncommon, hence need regular follow up.

References:

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