LACRIMAL SAC RHINOSPORIDIOSIS-A CASE REPORT

1Dr. D. Sridhara Narayanan*, 2Dr. P. Fathima and 3Dr. S. Rajasekaran

1Professor, Department of ENT, Sree Balaji Medical College and Hospital, Bharath University, Chennai, Tamilnadu.
2MS Postgraduate, Department of ENT, Sree Balaji Medical College and Hospital, Bharath University, Chennai, Tamilnadu.
3Professor and HOD, Department of ENT, Sree Balaji Medical College and Hospital, Bharath University, Chennai, Tamilnadu.

ABSTRACT: Rhinosporidiosis is a chronic granulomatous disease caused by rhinosporidium seeberi. Mostly seen in tropics especially southern India and Sri Lanka.[1] Rhinosporidiosis affects nose and nasopharynx and rarely lacrimal sac, conjunctiva, skin and tonsils. We report a case of 32yr old male with complaints of diffuse left medial infraorbital swelling and intermittent watering from left eyes for past one year. Excision biopsy was done and histopathology report confirmed rhinosporidiosis. We report this case as Lacrimal sac rhinosporidiosis of medial supraorbital pathology is rare.

KEYWORDS: Rhinosporidiosis, Rhinosporidium seebri, lacrimal sac.

INTRODUCTION

Rhinosporidiosis is a chronic granulomatous disease caused by rhinosporidium seeberi. In 1900, organism was isolated initially by seeberi in Argentina.[2] It is included in class, mesomycetozoea, aquatic protistan parasite. Disease is epidemic in India and Sri Lanka, Africa and South America.[3,4,5,6]

Most commonly seen in adult male, transmitted by direct contact with spores through infected clothes, fingers, dust, swimming in stagnant water; it also seen in cats, cattle, dogs, goats, ducks, parrots and swan.[7] Rhinosporidiosis affects nose and nasopharynx(70%), also conjunctiva, lacrimal sac(15%), tonsils, lips, palate, uvula, epiglottis, maxillary antrum, larynx, trachea, ear, scalp, vulva, vagina and penis.[8]
CASE REPORT

A 32 year old male presented in dept of ENT, sree Balaji medical college and hospital,chennai,tamilnadu,india in march 2016,with left medial infraorbital swelling for past 1yr,which was small in size gradually progressive. He also had watering of eyes which was intermittent(fig 1). He has history of swimming in ponds in his village. On examination 2x3 cm diffuse oval soft nontender swelling in medial infraorbital region.no rise in temperature. Mobile in all direction. The vision and extraocular movements were normal. On lacrimal syringing regurgitation of fluid was present confirming partial patency of left nasolacrimial passage. CT PNS(fig 2) shows isodense lesion with mild enhancement within preseptal compartment along inferior aspect of left orbit .FNAC was nonconclusive. Total excision of lesion done under GA(fig 3). Multiple pink vascularised white studs mass was removed as a whole without spilling spores. The biopsy specimen was sent for histopathological examination(fig 4). Histological section showed numerous sporocysts in various stages of maturation under the stratified squamous epithelium of the lacrimal sac (H&E:X 100 magnification). Around the spores, stroma showed infiltration with chronic inflammatory cells, consisting of lymphocytes and few plasma cells(fig 5).

Histopathology examination confirmed the diagnosis as lacrimal sac rhinosporidosis of medial supraorbital pathology.Postoperative period was uneventful. The patient was treated with diaminodiphenyl sulfone (Dapsone) 100 mg/day orally postoperatively for three month. There was no recurrence till date during follow up.

Fig 1: clinical photograph showing lesion
Fig 2: CT PNS

FIG 3: EXCISION BIOPSY
DISCUSSION
Rhinosporidiosis is a waterborne disease caused by rhinosporidium seeberi. Disease is epidemic in India and Sri Lanka (88%)\(^6\), Africa and South America. Rhinosporidiosis affects nose and nasopharynx, also conjunctiva, lacrimal sac, tonsils, lips, palate, uvula, epiglottis, maxillary antrum, larynx, trachea, ear, scalp, vulva, vagina and penis. Primary cases occur only 10% \(^{10}\). The conjunctiva was involved in 76 (92.68%) cases and lacrimal sac involved in 6 (7.32%) cases.\(^{11}\) Most commonly disease is transmitted from bathing in stagnant water. In case of lacrimal sac, infection would have reached from nose or eye through lacrimal
canaliculi without affecting conjunctiva and nose.\textsuperscript{12} Epiphora is unusual because infection spread through perisaccular and pericanalicular.\textsuperscript{8} Dacryocystectomy has been described for lacrimal rhinosporidiosis.\textsuperscript{11} Dapsone was given to prevent recurrence\textsuperscript{13} by arresting maturation of spores and accentuated granulomatous response with fibrosis following therapy\textsuperscript{14}

CONCLUSION

We report this case as Lacrimal sac rhinosporidiosis of medial supraorbital pathology is rare.

REFERENCES