

UNUSUAL PRESENTATION OF RHINOSPORIDIOSIS - A CASE REPORT

Anupma Jyoti Kindo^a, J. Kalyani^a, Sandhya Sundaram^b, Senthil Kannan M^c, A. Ravi Kumar^c

ABSTRACT

Rhinosporidiosis is a chronic infestation by the fungus Rhinosporidium seeberi, which predominantly affects the mucus membranes of the nose and nasopharynx. We report

a case of rhinosporidiosis with presentation as a mass extending up to the nasopharynx.

Key words: Rhinosporidiosis, nasopharynx, case reports.

INTRODUCTION

Rhinosporidium is a cosmopolitan disease of man and domestic animals endemic in India and Sri Lanka and is hyperendemic in southern districts of Tamil Nadu.

It usually presents as a polypoidal growth in nasal cavity that involves anterior part of nasal septum and nasal vestibule[1].

The aim of this paper is to report an interesting unusual case of rhinosporidiosis.

Case report: A 38 year old male Assistant Engineer by profession hailing from Ennore, Northern part of Chennai came to the OPD of the ENT Department with complaints of foreign body sensation in the throat for past 8 years. Patient was able to feel the sensation whenever he had an episode of upper respiratory tract infection associated with unproductive cough. He complained of recurrent episodes of nasal obstruction. He would develop throat irritation and cough whenever he tried to feel the mass.

There was no complaint of otalgia, no history of epistaxis and trauma, No medical procedure done in the past.

Local examination showed a pinkish pedunculated mass measuring 3x3 cm hanging from the nasopharynx extending upto the level of the posterior 1/3rd of the tongue along the posterior pharyngeal wall. It was non pulsating or expansile, did not bleed on touch.

Posterior nasal examination showed bilaterally patent eustachian tube, the right choana was filled with a pinkish material, left choana was free.

An endoscopic excision of the nasopharyngeal mass was done and the tissue was sent to the Microbiology and Pathology Laboratory.

Macroscopic and Microscopic findings

The specimen on gross examination showed a soft pink mass with white spots on the surface.

CORRESPONDING AUTHOR :

Dr. ANUPMA JYOTI KINDO

Associate Professor Department of Microbiology
Sri Ramachandra Medical College and Research Institute
Porur Chennai - 600 116

Mobile : 9382740138 Email : anupmalakra@yahoo.com

^a Dept. of Microbiology

^b Dept. of Pathology

^c Dept. of ENT, Head & Neck Surgery

The KOH mount showed numerous sporangiospores with occasional sporangium (fig1). The gram smear showed rounded structures which were consistent with rhinosporidiosis.

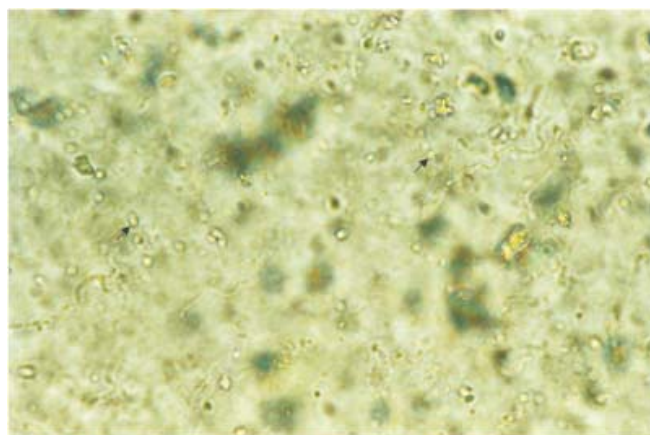


Fig 1. The KOH mount showing numerous sporangiospores with occasional Sporangium (Magnification 400X)

Haematoxylin and eosin staining of tissue sections showed polypoidal fragments lined by stratified squamous epithelium. The subepithelium showed many globular cysts. Each of these cysts represented a thick walled sporangium containing numerous "daughter spores" in different stages of development (fig2). The fibroconnective stroma showed fibroblasts and myofibroblasts and an inflammatory infiltrate consisting of polymorphs and eosinophils. (fig 3). These changes were characteristic of rhinosporidiosis.

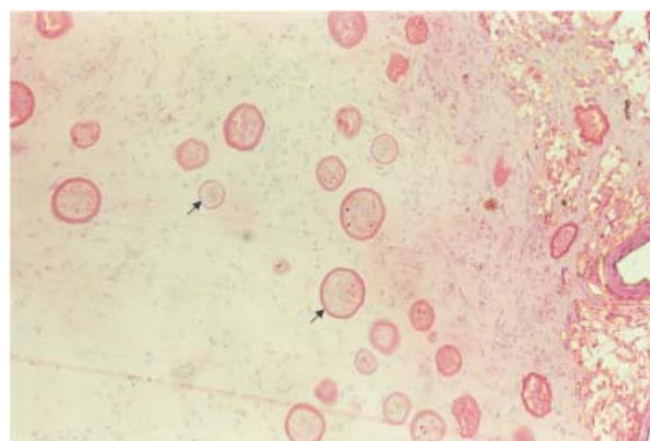


Fig 2. Tissue sections stained with Haematoxylin and eosin stain showing "daughter spores" in different stages of development (Magnification 400X)

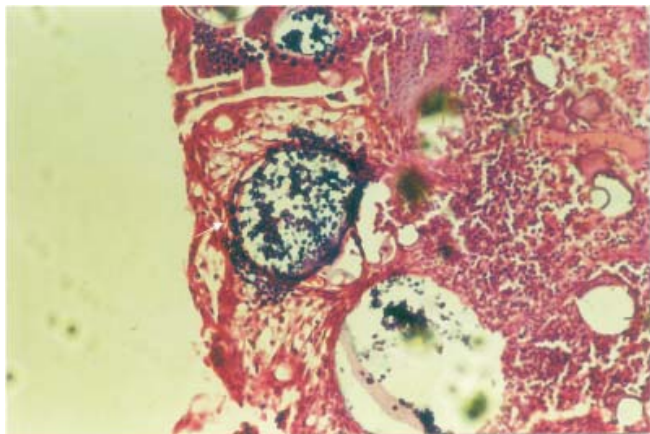


Fig 3. Tissue staining with haematoxylin and eosin showing characteristic features of rhinosporidiosis : the polypoid fibroconnective stroma with sporangiospores. Surrounded by dense inflammatory infiltrate consisting of polymorphs and eosinophils (Magnification 200X)

Functional endoscopic sinus surgery was performed and the patient was discharged on the second day post operatively.

Discussion

Other than India and Sri Lanka where this disease is endemic, it has been recognized in many other parts of the world, like South America, United states, England, Egypt and South Africa [2].

Mode of transmission is through water or dust, from which the endospores penetrate the nasal cavity mucosa, mature into sporangium within the submucosal compartment and after maturation burst with release of sporangia into surrounding tissue[2]. Clinically, the lesion

presents as a polypoid, soft mass, sometimes pedunculated, of the nose (primary site of infection), the eye and its adnexa, above all conjunctiva, or the urethra. Larynx, trachea, skin and lung are less frequently involved. Osteolytic bone infiltration is another clinical presentation [3]. Histologically the infected tissue reveals granulomatous reaction (mixed cell granuloma), pseudocystic abscesses and fibrosis around the causative organism [3].

Surgical excision is the mainstay of treatment. It has been advocated that a wide surgical margin is necessary to reduce risk of recurrence [4].

Rhinosporidiosis is a condition which both clinicians and laboratory personnel should keep in mind when managing patients from endemic places. Moreover, it is very interesting in such cases to follow the clinical course: An eventual recurrence of the lesion in our patient would mean a true relapse excluding the possibility of a reinfection, more probable in the endemic areas.

REFERENCE:

1. Emmons CD, Binford CH, Utz JP and Kwon-Chung, K. J.: Medical Mycology, 3rd Edition. Lea & Febiger, Philadelphia, 1977: 464-470
2. Thomas T, Gopinath N, Betts RH. Rhinosporidiosis of the Bronchus. Br.J Surg 1956; 44: 316-19
3. Saqulain G, Jailisi M. Rhinosporidiosis: presenting as a mass in the oral cavity. Pak J Otolaryngology 1996; 12: 218-20
4. Cho SS, Loh KS. Rhinosporidiosis an unusual cause of nasal masses gains prominence. Singapore Med J 2004; 45 (5): 224-226