

## Clinical Image

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# Recurrent rhinosporidiosis: A clinical picture

Prasanth L\*; Jyoti Mishra; Niharika Mishra; Roohie Singh

Command Hospital (Eastern Command), Kolkata, West Bengal, India.

\*Corresponding Author: **Prasanth L**

Command Hospital (Eastern Command), Kolkata,  
West Bengal, India.

Email: ragavprash28@gmail.com

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### Description

28 year, male, driver by profession and resident of Kerala presented with complaints of recurrent Left nasal obstruction and intermittent epistaxis from left nostril of 6 months. He had undergone four excisional surgeries since last 3 years for same complaints. Diagnostic nasal endoscopy revealed a strawberry like mass which bled on probing. It was filling left nasal cavity likely arising from middle turbinate (Figure 1A). CECT of paranasal sinuses revealed soft tissue attenuating content in left nasal cavity. The patient underwent Coblation assisted endoscopic excision of (L) nasal mass (Figure 1B). The mass was excised in toto with anterior part of left middle turbinate to which it was attached (Figure 1C). Histopathological examination was consistent with Rhinosporidiosis (Figure 2A-2C). Postoperatively the patient was started on Tablet Dapsone 100 mg once daily for 6 months.

### Discussion

Rhinosporidiosis is a chronic granulomatous infectious disease which predominately affects the mucosal membranes of nose and nasopharynx, caused by the parasite *Rhinosporidium seeberi*. It usually occurs as a result of direct traumatic inoculation with the organism which grows in stagnant water. The characteristic lesions in the nasal passage are polypoidal, granular, red in colour due to pronounced vascularity, with a surface

containing yellowish pin head sized spots which represents underlying mature sporangia [1].

The definitive diagnosis of Rhinosporidiosis is by histopathology with the identification of the pathogen in its diverse stages. Radiological imaging particularly CT and MRI are helpful in outlining the extent of the disease as well as excluding other pathology in patients presenting with nasopharyngeal masses. Differential diagnosis include antrochoanal polyp with squamous metaplasia, inverted papilloma, extra nasopharyngeal angiofibroma, etc. [2].

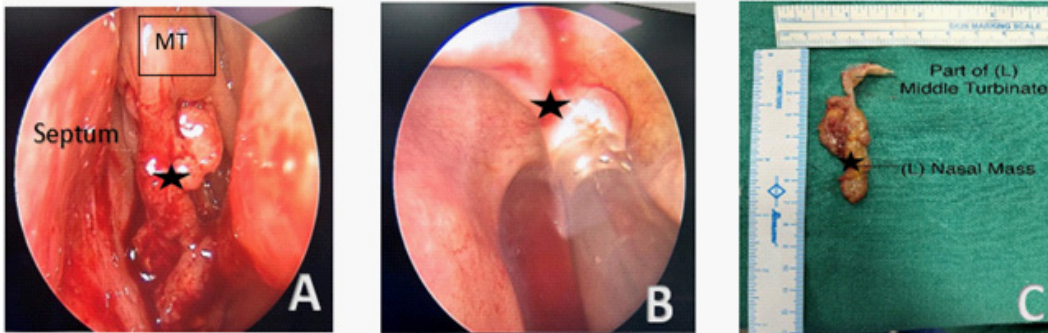
Recurrence is known to occur in 10% of cases after excision [3]. Here, we emphasize the importance of coblation assisted excision and medical management using Dapsone to reduce risk of recurrence.

### Declarations

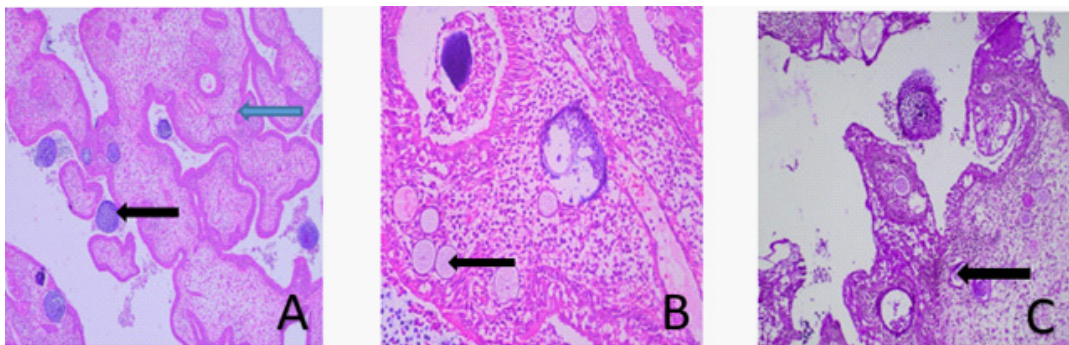
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**Figure 1:** (A) Endoscopic view of left nasal mass with strawberry appearance (star) attached to middle turbinate (MT). (B) Coblation assisted excision of left nasal mass. (C) Excised specimen with part of left middle turbinate.



**Figure 2:** (A&B) Haematoxylin and Eosin stain (10x) shows papillomatosis of lining squamous epithelium with focal hyperplasia (blue arrow). Multiple sporangia were noted with variable maturity stages (black arrows), few are ruptured with an inflammatory response by eosinophils, lymphocytes and neutrophils. (C) PAS stain 10x – variably sized thick-walled PAS positive sporangia with numerous microspores within (black arrow).

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