

**INTRODUCTION**
Rhinosporidiosis is a chronic granulomatous disease caused by *Rhinosporidium seeberi*, a protistal aquatic parasite belonging to the newly described class Mesomycetozoea at the animal-fungus boundary.1 It usually affects the nose, nasopharynx and lacrimal sac. Rhinosporidiosis occurs universally, although the highest prevalence is in Southern India and Sri Lanka. Primary tracheal rhinosporidiosis is very rare but few cases have been reported with concomitant or previous history of surgical excision of nasal and nasopharyngeal rhinosporidiosis.2-4 Tracheobronchial rhinosporidiosis poses diagnostic and therapeutic challenges because of its presentation in critical anatomical location. We report a case of tracheal rhinosporidiosis which is probably the first case reported from Bangladesh.

**CASE REPORT**
A 35 years old man presented with progressive respiratory distress and dry irritating cough for 3 months. At presentation, he had stridor. Examination of nose revealed septal perforation with edematous mucosa. Fiberoptic laryngoscopy revealed a reddish soft tissue mass below the vocal cord level. Magnetic Resonance Imaging scan showed a soft tissue opacity within the trachea occluding the airway. The patient had history of excision of nasal and nasopharyngeal rhinosporidiosis four times earlier.

Tracheostomy was done prior to direct endoscopic examination to secure airway. A reddish fleshy mass was found in the right anterolateral wall of the trachea from which biopsy was taken. Histopathological examination revealed Rhinosporidiosis. Then definitive surgery was carried out in the following week. A transverse cervical incision was given just below the cricoid. Strap muscles were retracted laterally; isthmus of the thyroid gland was divided and retracted laterally. A vertical incision was given over the second and third rings of trachea and the mass was excised by bipolar diathermy. The trachea was repaired by perichondrial stitch. Before discharge from hospital, fiberoptic endoscopic examination reveals no residual lesion within the trachea and tracheostomy was closed without any problem. The patient was under periodical follow-up and no recurrence was observed till 30 months of follow-up.

**DISCUSSION**
Rhinosporidiosis may involve trachea by auto-inoculation, haematogenous spread or lymphatic spread. Spillage of endospores from polyps after trauma or surgery is thought to be followed by auto-inoculation through the adjacent epithelium.5 In the depicted case, involvement of trachea might be the result of implantation of spores during intubations for previous surgeries, inhalation of discharged spores, or trickling of infected saliva into the trachea.2-4 Diagnosis of tracheobronchial rhinosporidiosis by means of bronchoscopic biopsy is dangerous because of the high risk of bleeding and inability to visualize the full extent of mass.2-3 CT scan or MRI may provide better details about the extent of the lesion. Virtual broncho-

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**ABSTRACT**
Rhinosporidiosis in tracheobronchial tree is extremely rare. It poses diagnostic and therapeutic challenges and has high chance of mortality because of presentation with respiratory distress. We report such a case of a 35 years old man who presented with respiratory distress and dry irritating cough. Fiberoptic laryngoscopy revealed a reddish soft tissue mass below the vocal cord level. Magnetic Resonance Imaging showed a soft tissue opacity within the trachea occluding the airway. Direct endoscopic biopsy was done after securing the airway. Histopathological examination confirmed rhinosporidiosis and the mass was excised through an external approach. The patient was free of symptoms and no recurrence was reported till 30 months of follow-up.


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Tracheal Rhinosporidiosis: An Uncommon Life Threatening Benign Condition
Kanu Lal Saha, Belayat Hossain Siddiquee, Mosleh Uddin and Md. Nazrul Islam

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Tracheal rhinosporidiosis is an emerging imaging modality for the diagnosis of airway disease especially where rigid bronchoscopy is dangerous.\(^3\)

Diathermy excision and wide base cauterization is the first line of treatment in most cases of rhinosporidiosis. Medical treatment (dapsone) was not applied in this case as its role is uncertain. Other therapeutic options include laser cauterization through bronchoscope, combined rigid bronchoscopy and tracheostomy.\(^3\)

Recurrence after surgical resection is quite common in nasal and nasopharyngeal rhinosporidiosis but the exact percentage of recurrence in tracheobronchial lesions is not known due to rarity of cases.\(^2\) So patients must be kept under strict follow-up for early detection of recurrence before development of respiratory distress and manage it with minimal trauma.

Nasal and nasopharyngeal rhinosporidiosis has long-term morbidity and minimal mortality but tracheal rhinosporidiosis has high chance of mortality because of presentation with acute respiratory distress. Diagnosis and management of these patients are also very challenging.

In an adult patient presenting with respiratory distress if endoscopy and imaging reveals a space occupying lesion in the laryngotracheobronchial region clinician should keep in mind the rare possibility of rhinosporidiosis along with other common conditions. Thorough search should be done to get information about any such lesion in the nose and nasopharynx.

REFERENCES


