

RECURRENT NASAL RHINOSPORIDIOSIS: A CASE REPORT

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ABSTRACT

A rare chronic granulomatous disease is Rhinosporidiosis characterized by polypoidal lesions of mucus membrane .Commonly affected area are nose, conjunctiva, naso-pharynx and palate. The causative agent is rhinosporidium seeberi. The disease has been reported in 70 countries. It is prevalent in Indian subcontinent and endemic in Sri Lanka and India.

We hereby present a case of 60 years old male native of Uttar Pradesh, eastern zone of India with recurrent polypoidal nasal rhinosporidiosis. Patient presented with long standing history of nasal obstruction and intermittent epistaxis for three years. Diagnosis was confirmed by histopathological examination and was treated by complete surgical excision .This was a very unusual cause of nasal mass in our setting. Nasal rhinosporidiosis lesion may largely mimic other nasal polyps, therefore it is a message for clinicians to consider Rhinosporidiosis as differential diagnosis for patients presenting with nasal mass or swelling. Tablet dapsone is effective to reduce recurrence. Laser technique is very new tool and quiet safe for removal of nasal rhinosporidiosis and prevention of recurrence.

KEYWORDS: Recurrent, Rhinosporidiosis , Nasal Polyp.

INTRODUCTION

The disease predominantly affects mucosal lining of the nasopharynx, conjunctiva and palate. Lesions involving other regions of the body like brain, trachea, ear, skin and subcutaneous tissues have been reported which are rare (1-2). Through molecular biology this organism has demonstrated characteristics of aquatic protistan parasitic microbe and now it has been classified as mesomycetozoa, along with 10 other parasitic and saprobic microbes (1,3).

This infection do not show racial predilection although exhibit male gender preponderance. Other than human it has been reported in horses and bovines (1,5)

Nasal rhinosporidiosis is endemic in India, Sri Lanka & Bangladesh with sporadic cases reported from other parts of the world such as Argentina, Brazil, Italy, Iran, Tanzania, Nigeria & Uganda (1-2, 4-6). Rhinosporidiosis is common in South India and with high incidence in Tamil Nadu, west Bengal and central India (7).

This report therefore is aimed at documenting case of 60 year old native of Jhansi, Uttar Pradesh with recurrent polypoidal nasal rhinosporidiosis.

CASE REPORT

A 60 years old male who was referred to medical college in ENT OPD by local doctor with long standing history of right-sided nasal obstruction and

gradual but progressive enlargement of right nasal growth for three years. Patient also gave the history of epistaxis, intermittent post nasal drip and nasal itching. No history of constitutional symptoms. He also complained that he had similar complain eight years back for which he underwent surgery by local surgeon. Patient was farmer by occupation for 40 years. There was no family history of similar complain.

On general examination: we saw an elderly man with normal health, non paler, non dyspneic and had no conjunctival growth. On local examination, nasal polypoidal mass, which was friable, slightly mobile filling the right nasal cavity. It was erythematous, non-tender & bleed on touch. (fig. 1) The maximum diameter was 1.4 c.m. with short pedicle arising from lateral side of right inferior turbinate. The left side nasal cavity, nasopharynx & palate were normal. No regional / local lymphadenopathy was noted. Systemic examination was unremarkable.

All biochemical test, haematological test & ECG were within normal limits.

Patient was planned for surgery of nasal lump. It was completely excised with electrical cauterisation of lesion's base. Gross examination of the resected lesion depicted an intact polypoidal mass with a body & stalk measuring 1.4 c.m. in maximum diameter. It was soft and friable in consistency.

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Histopathological examination revealed hematoxylin & eosin stained section showed large number of fungal spherules embedded in a stroma of connective tissue and capillaries. The spherules are 10-200 μm in diameter & contain thousands of endospores about 6-7 μm . (8, 9). (fig. 2) Postoperatively condition of patient was unremarkable. Follow up for three months was unremarkable. No signs of recurrence was seen.



Fig 1: Nasal Polyp Coming Out Of Right Side of Nose Which Appears to be Erythematous, Non-Tender & Bleed on Touch

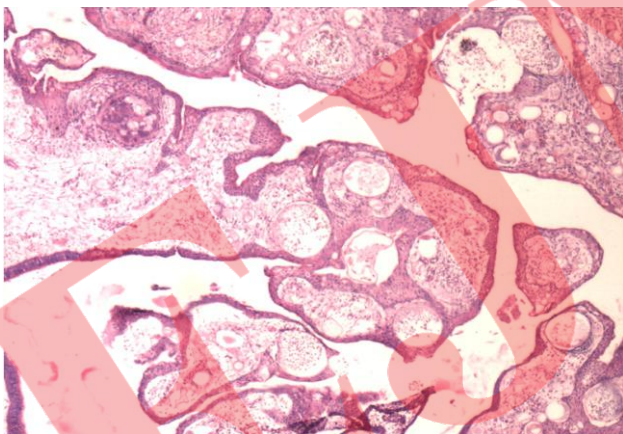


Fig 2: Microscopic Picture 10X View : Histopathological Examination Revealed Hematoxylin & Eosin Stained Section Showed Large Number Of Fungal Spherules Embedded In A Stroma Of Connective Tissue And Capillaries. The Spherules are 10-200 Mm in Diameter & Contain Thousands of Endospores About 6-7 μm

DISCUSSION

Rhinosporeidiosis is a disease of ancient times. It is endemic in Indian subcontinent (1,2,4-6,10) It is usually common in Southern India especially Tamil Nadu (7). However sporadic cases have been reported all over India it is rare in Bundelkhand region of Uttar Pradesh. Mode of transmission to human is through direct contact with spores present in dust, soil or prolonged exposure to stagnant water.(1,5,11-12). Commonly patient present with history of gradual

nasal growth, on & off epistaxis, post nasal drip, itching, sneezing (1-2, 4-6, 10-12).

Nasal Rhinosporidiosis is clinically defined as single pedunculated polyp, multiple sessile polypoid tumours. Commonly ordinary polyp arises from middle turbinate, rhinosporidiosis usually involve mucosal lining of naso- pharynx, inferior turbinate, septum or nasal floor. Hence nasal polyps originating from these locations should always be treated with high degree of suspicion.

Wide & complete removal of polyp followed by electrocautery of the lesion's base is recommended for rhinosporidiosis (1,3,4-6,10-12). It is hypothesized that cauterization of lesion's base is mandatory to avoid recurrence resulting from spillage of endospores to the adjacent tissue (1,2,4,5,11). Tablet dapsone respond well following surgical excision as it appears to arrest maturation of the sporangia and promote fibrosis in the stroma.(13,14). It is also recommended for 1-2 years after surgical removal to avoid recurrence and dissemination. (14,15). However patient compliance is very poor to continue treatment for such a long duration.

CONCLUSION

Nasal rhinosporidiosis remains a seldom disease in bundelkhand region of Uttar Pradesh. Person who visit water bodies should avoid to swim with cut wounds as this organism gets entry to the human body through cut wounds. Prevention is the best option. However, with reports of sporadic cases in our region, there is message for clinicians in our setting to consider rhinosporidiosis as differential diagnosis while dealing a case of nasal polyp.

Tablet dapsone is effective medical treatment to arrest further growth preoperatively and reduce recurrence postoperatively, if used for duration of one year. For such long medical treatment compliance is poor. Laser technique is very new tool and quiet safe.

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