

## Rhinosporidiosis- multiple primary cutaneous lesions with varied morphology in an immunocompetent patient.

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### Abstract

Rhinosporidiosis is a chronic granulomatous infection caused by *Rhinosporidium Seeberi*. It usually manifests as vascular friable polyps in mucosa of nasal cavity, eyes, rectum and genitalia. Cutaneous lesions are exceptional. Multiple lesions of varied morphology on skin is presented without any lesion involving mucosa. Diagnosis was confirmed by histopathological examination. The patient had no other abnormality as evidence of immune suppression on investigations. He is 48 years old working in stagnant lake water. Lesions were treated successfully with electrocautery.

**Key words:** Rhinosporidiosis, *Rhinosporidium Seeberi*, Disseminated, sporangia, Electrocautery

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### I. Introduction

Rhinosporidiosis is a chronic granulomatous infection of the mucous membranes that usually manifests as vascular friable polyps that arise from the nasal mucosa or external structures of the eye.<sup>[1]</sup> Nasopharynx, oropharynx, rectum and external genitalia are also involved.<sup>[2]</sup> The first case was described by Guillermo Seeberi from Buenos Aires in 1900.

Cutaneous Rhinosporidiosis is rare. A case of primary cutaneous Rhinosporidiosis with multiple lesions of different morphology in a 48 year old male patient who was not having any evidence of immunodeficiency is presented. He did not have any mucosal lesions.

### II. Case history

A 48 year old male patient presented with multiple asymptomatic erythematous lesions of 3-5 cm diameter on different parts of his body involving arm, abdominal wall and back. Lesions were erythematous plaques with erosions and granulation tissue while some were having erythematous smooth surface at the time of examination. Some lesions appeared like erythematous seborrheic keratoses. (Fig1, Fig2, Fig3) They developed gradually in 5-6 months. They were asymptomatic. No similar lesions were seen in nose, eyes or other mucous membrane.

The patient had no systemic complaints. He was not on any systemic medications continuously for any illness.

The patient had similar lesions 2 years ago on the arms which were removed with electrocautery.

No other person in the family had similar chronic lesions.

This patient regularly works in lake digging sand.

His blood investigations including blood sugar and HIV were normal.

Histopathology examination showed subepithelial large sporangial cysts with numerous small endogenous spores within the cysts.

### III. Discussion :

With the lesions of varied morphology and long history of slow growth various clinical possibilities were considered. Different chronic granulomatous infections and cutaneous lymphoma were considered. Histopathology confirmed the diagnosis.

Rhinosporidiosis is caused by *Rhinosporidium Seeberi*. It was considered a fungus but now the causative organism has been identified by genetic techniques as a member of the aquatic *Protista* rather than a fungus.<sup>[4]</sup>

There are no experimental models, and the organism cannot be cultured. Ninety percent of reported cases are from India and Sri Lanka.<sup>[4]</sup>

Mode of spread also remains debatable-the more acceptable being that it spreads from sand and water especially stagnant water sources like wells, pond, tanks etc in endemic areas.

This is more common in males usually and seen in the 3<sup>rd</sup> and 4<sup>th</sup> decades of life.

Dissemination is extremely rare.<sup>[5]</sup>

Surgical excision with electrocautery is a common modality of successful treatment.<sup>[6]</sup>

Some have tried dapsone as a medical treatment.<sup>[7]</sup>

As the lesions were not deep lesions could be removed satisfactorily with electrocautery..

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Fig.1 shows lesions on arm

Fig.2 shows lesions on abdominal wall

Fig.3 shows lesions on back