

CASE REPORT

PALATAL PERFORATION DUE TO TERTIARY SYPHILIS IN 56 YEARS OLD MALE PATIENT FROM CHENNAI, INDIA

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ABSTRACT

Syphilis is caused by microaerophilic spirochete called *Treponema pallidum*. Syphilis is a sexually transmitted disease. If left unnoticed and untreated, syphilis can progress from mild primary to severe tertiary stage. It is commonly seen in immunodeficient patients. Syphilis belongs to re-emerging group of diseases. The non-cancerous, granulomatous growth called gumma is present in tertiary syphilis. It can be on tongue or hard palate, which may develop into perforation of the hard palate.

KEY WORDS: Syphilis; Spirochete; *Treponema Pallidum*; Sexually Transmitted Diseases; Tongue; Hard Palate; Human Immunodeficiency Virus; Maxillary Sinus; Granuloma; Mucormycosis.

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INTRODUCTION

Syphilis is one of the sexually transmitted diseases, predominantly seen in immune compromised individuals. Syphilis patients are most commonly tested for HIV (human immunodeficiency virus) infection, as they go hand in hand. Co-infection of syphilis, HIV and other immune compromising diseases are not uncommon. Though syphilis is common, the palatal perforation is rarely seen. The main mode of transmission is through sexual contact including oral, anal and vaginal sex. It has vertical transmission that can affect the unborn child.²

It has four stages: 1. Primary, 2. Secondary, 3. Latent, 4. Tertiary. Gumma is a non-cancerous, granulomatous lesion seen in tertiary syphilis. It is most commonly seen in hard palate or tongue. They may develop into perforation in hard palate as a result of not getting proper treatment or not being diagnosed.¹

The gumma then develops as an ulcerative surface covered with exudate like fibrin, polymorphic nuclear leukocytes and necrotic tissue fragments. The ulcer on long term erodes the palatal surface to form the perforation.³

CASE PRESENTATION

A 56 years old male patient was referred with com-

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plaints of purulent discharge from nose and nasal regurgitation of food for the past six months. Patient had noticed a small vesicular eruption on the hard palate two years back, which ruptured after six months leaving a pinhole opening which then gradually enlarged to the present size. There was no history of injury to the hard palate. Family and past medical history was not significant. Patient had history of extramarital affairs since seven years and been smoking cigarettes, approximately 3 packets/day since 30 years.

On general examination, his vitals were normal. On local examination, a 4x3 cm circular perforation was noted on the mid palate (Figure 1). Based on the clinical examination and history of the patient, the differential diagnosis of palatal perforation due to tertiary syphilis was given. The other differentials were malignancy of the palate, midline lethal granuloma, and mucormycosis. VDRL was positive for syphilis. However ELISA was negative for HIV. The patient was advised palatal obturator and was put on penicillin.⁴



Figure 1: Circular palatal perforation (4x3 cm) in tertiary syphilis patient in mid palate

DISCUSSION

The causative organism for syphilis is *Treponema pallidum* (*T pallidum*), a spirochete, which is a member of the order spirochaetales.³ Syphilis belongs to re-emerging group of diseases. The non-cancerous, granulomatous growth called gumma is present in tertiary syphilis. It can be on tongue or hard palate; which may develop into perforation of the hard palate.¹

There are many differentials for palatal perforation; which include bacterial osteomyelitis, Wegener's granulomatosis, invasive fungal infection, necrotising sialometaplasia and malignancy. The gumma then develops as an ulcerative surface covered with exudate like fibrin, polymorphic nuclear leukocytes and necrotic tissue fragments. The ulcer on long term erodes the palatal surface to form the perforation.

The treatment options for the perforation of palate are a simple obturator or hollow bulb obturator (open or closed type) to get normal oral functions and aiding speech of the patient.

CONCLUSION

Syphilis is a re-emerging public health concern.

Early detection and treatment of syphilis can prevent the disease from causing perforation of palate. Other infectious disease causing palatal perforation are tuberculosis, rhinocerebral mucormycosis, aspergillosis and other conditions like Wegener's granulomatosis, mucoepidermoid carcinoma and carcinoma of maxillary sinus.

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CONFLICT OF INTEREST

Authors declare no conflict of interest.

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None declared.

AUTHORS' CONTRIBUTION

The following authors have made substantial contributions to the manuscript as under:

Conception or Design:	VN
Acquisition, Analysis or Interpretation of Data:	VN, KP
Manuscript Writing & Approval:	VN, KP

All the authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.



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