

## Case Report

# Oronasal syphilis: a forgotten disease?

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## ABSTRACT

Syphilis is a multistage disease that is usually transmitted through sexual contact or mother-infant transmission route. The incidence of oronasal syphilis has significantly decreased with the advent of penicillin therapy. However, it continues to exist, even though almost forgotten by the clinician. In this paper, we report one such case of a rare presentation of tertiary oronasal syphilis. A high index of suspicion is required to avoid missing the diagnosis of this masquerader.

**Keywords:** Oronasal, Syphilis, Sexually transmitted disease, Penicillin

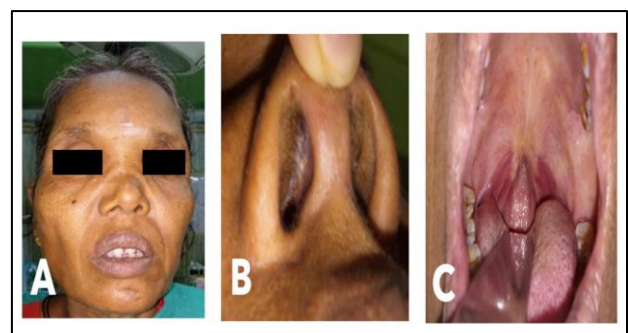
## INTRODUCTION

Syphilis is one of the most familiar diseases of humanity, dating back to prehistoric times. This disease has adequate treatment in the present day and has become rare, to the extent that it has been clinically forgotten and frequently missed.<sup>1</sup> However, it continues to exist even today and needs to be remembered clinically. In this backdrop, we present one such advanced case that was diagnosed and treated by us.

## CASE REPORT

A 50-year-old heterosexual female presented to us with complaints of bilateral progressive nasal obstruction (left > right) for 1 year and history of loss of smell for 6 months. No record of multiple sexual partners or significant past history was available. On examination of the nose, there was dorsal bridge collapse, a dorsal widening, saddle nose deformity (Figure 1A), ulcerative lesion, associated bilateral vestibular stenosis (Figure 1B) and pale nasal mucosa. On examination of the oral cavity and oropharynx, the uvula was absent and the soft palate was contracted and scarred along with the anterior and posterior pillars (Figure 1C). The rest of the ENT

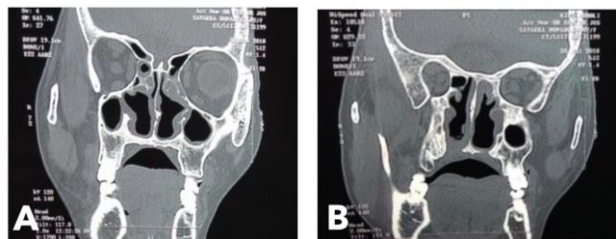
examination was normal. On diagnostic nasal endoscopy, the examination findings were confirmed and additionally atrophied turbinates and adhesions were noticed.



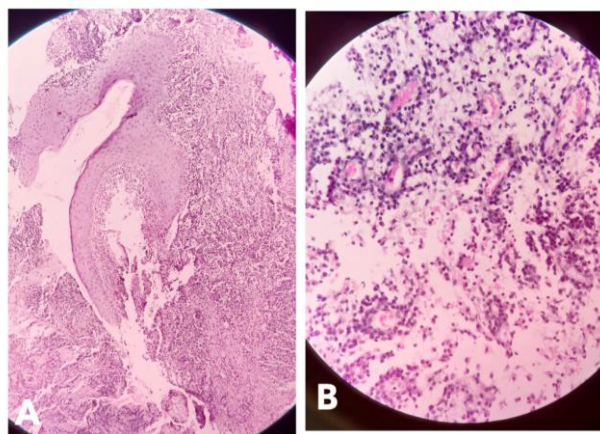
**Figure 1: Clinical photograph of the patient. (A) the saddle nose deformity, (B) nasal synechiae, (C) oral fibrosis and contracture.**

Serological tests like serum VDRL (venereal disease research laboratory), CSF VDRL, TPHA (Treponema passive haemagglutination) sputum acid fast bacilli, split skin biopsy were done.<sup>2</sup> On laboratory examination, ESR was normal, HIV, HBsAg were negative. Serum VDRL

was positive (1:16), Serum TPHA was positive (1:16) and CSF VDRL positive. Computed tomography of paranasal sinuses revealed atrophic middle and inferior turbinates with bilateral vestibular stenosis (Figure 2A and B).



**Figure 2 (A and B): CT scan showing bilateral atrophic middle and inferior turbinates.**



**Figure 3: Pictomicrograph showing features of chronic inflammation, metaplasia, granuloma formation and vasculitis (H and E, A-10x magnification, B-40x magnification).**

A nasal biopsy was then taken and histopathology report read atrophic epithelium, infiltration of plasma cells, lymphocytes, perivascular cuffing of lymphocytes; swollen endothelial cells features suggestive of syphilis (Figure 3A and B). The patient was diagnosed with oronasal and neurosyphilis. After discussing with neurophysician, patient was started on Injection Crystalline penicillin 24 million units intravenous for 2 weeks and later discharged.

## DISCUSSION

With the advent of penicillin therapy, syphilis cases have reduced and there was a rise in viral sexually transmitted diseases like HIV. However, since 1990, there has been a rise in cases of syphilis due to an increase in homosexuality, drug abuse, concomitant infection with HIV and also lack of awareness among the public. Syphilis is also known as 'GREAT IMITATOR' as it mimics a large variety of other diseases in terms of symptoms and signs which may be confused with Measles, Rubella, Kawasaki disease, Chancroid and oronasal conditions like Rhinoscleroma, Tuberculosis, Leprosy, Pityriasis lichenoides.<sup>3</sup> In the present case, all the conditions were ruled out with serological tests and patient was confirmed to have tertiary syphilis. All syphilis patients are treated with Penicillin G and structural deformity for the nose is corrected by rhinoplasty and palatal defects are corrected by placing obturator or palatal flap. Our patient was not willing to undergo extensive corrective surgeries hence was treated only medically. Structural deformities are not reversible with medical treatment, but there is a halt in further disease progressions such as septal perforation or hard palate perforation. The social stigma associated with this disease and poor patient compliance is observed, resulting in high dropout rates. There are very few cases of oronasal syphilis reported in the literature (Table 1).

**Table 1: Recent previous studies reporting oronasal syphilis.**

Author	Year	Design of study	Place	Findings	Stage of syphilis reported	Treatment given
Titinchi et al <sup>4</sup>	2020	Case report	South Africa	2 cases hard palate perforation	Tertiary syphilis	Both patients were treated with Crystalline penicillin and an obturator was placed
Prasad et al <sup>5</sup>	2016	Case report	Pune, India	81-year-old male with saddle nose deformity and perforation of septum	Tertiary syphilis	Penicillin G
Gugatschka et al <sup>6</sup>	2012	Case series	Austria	3 cases of oronasal syphilis	-	Penicillin G
Chaudhary et al <sup>7</sup>	2007	Case Report	New Delhi, India	13-year-old boy with hard palate perforation	Congenital syphilis	Penicillin G

Continued.

Author	Year	Design of study	Place	Findings	Stage of syphilis reported	Treatment given
Klemm et al <sup>8</sup>	2004	Case series	Germany	6 cases of otosyphilis	4patients-secondary syphilis 1patient–primary syphilis 1patient–congenital syphilis	Penicillin G was given to all patients. Two patients were given corticosteroid and pentoxifylline

## CONCLUSION

Syphilis is a sexually transmitted disease that has a social stigma associated with it. The diagnosis of oronasal syphilis requires a high index of suspicion. Despite advances in healthcare, the condition still exists and hence should be considered in the differential diagnosis of saddle nose deformity with atrophic rhinitis. Prompt detection and containment of disease is necessary to halt the disease spread in the community. Due to lack of awareness and varied presentation of syphilis, it is often missed and diagnosed late, resulting in irreversible deformities. Hence early screening and detection and of syphilis is needed as the lesions can be treated and reversed. Awareness of syphilis is necessary among the public as well as the population at risk.

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## REFERENCES

- World Health Organization. WHO guideline on syphilis screening and treatment for pregnant women. World Health Organization. 2017. <https://www.who.int/reproductivehealth/publication/srtis/syphilis-ANC-screenandtreas-guidelines/en/>. Accessed on 20 March, 2021.
- Park IU, Fakile YF, Chow JM, Gustafson KJ, Jost H, Schapiro JM, Novak-Weekley S et al. Performance of treponemal tests for the diagnosis of syphilis. Clin Infect Dis. 2019;68(6): 913-8.
- Hicks CB, Clement M. Syphilis: Treatment and monitoring. Waltham (MA): UpToDate. 2018; 21.
- Ikenberg K, Springer E, Bräuninger W, Kerl K, Mihic D, Schmid S et al. Oropharyngeal lesions and cervical lymphadenopathy: syphilis is a differential diagnosis that is still relevant. J Clin Pathol. 2010;63(8):731-6.
- Titinchi F, Behardien N, Morkel J, Opperman J. Perforation of the palate-A report of two Syphilitic Gumma cases. S A Dentol J.2020;75(6):311-5.
- Prasad BK, Mokamati S. Tertiary nasal syphilis: rare but still a reality. Arch Otolaryngol Rhinol. 2009;2(1):013-15.
- Gugatschka M, Hammer GP, Koele W, Reiter H, Friedrich G, Lang-Loidolt D. Syphilis is back: Presentation of three cases at the ENT department. B-ENT. 2012;8(1):65.
- Chaudhary M, Kashyap B, Bhalla P. Congenital syphilis, still a reality in 21 st century: a case report. J Med C Rep. 2007;1(1):1-3.
- Klemm E, Wollina U. Otosyphilis: report on six cases. JEuro Acad Dermatol Venerol. 2004;18(4):429-34.

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