

# SYPHILITIC PERFORATION OF THE NASAL SEPTUM

(A Clinical Study)

By

\*B. M. S. BEDI & \*\*S. ARUNTHATHI

Perforation of the nasal septum is a very interesting clinical finding. Being inconspicuous and symptomless, this is often missed in routine clinical check up unless and until special attention is paid to it during examination. Perforation of the nasal septum may be due to any of the following common aetiological causes; congenital malformation, traumatic, syphilitic, tubercular, leprosy and malignancy. Uncommonly it may be attributable to rare conditions like chrome ulcer, scleroma, gangosa, goundou, yaws and even maggots.

Our interest in the problem was aroused during our study on perforation of the palate<sup>1</sup> and study on scleroma<sup>2</sup> when out of three cases of acquired tertiary syphilis with perforation of the palate, two showed associated perforation of the nasal septum - a clinical finding often missed. We therefore made it a point to specially look at the septum while examining our patients. However during our present study we came across the following eight cases of perforation of septum - all belonging to syphilitic aetiology (Table 1).

TABLE-1  
*Syphilitic Perforation of the Nasal Septum.*

S. No.	Name	Age	Sex	Associated signs	V. D. R. L.	Diagnosis
1.	K.	67	M	Gumma bones	1 in 128	Acquired Tertiary
2.	M.	40	M	Aortic aneurysm-asymptomatic Neurosyphilis	V.D.R.L. 1: 64 CSF VDRL + ve	Acquired Tertiary
3.	M.P.	45	M	Depressed bridge of the nose Gumma skin	1 in 256	Acquired Tertiary
4.	M.	16	F	Palate Perforation-depressed bridge of the nose	1 in 16	Congenital
5.	M.M.	33	F	Depressed bridge of the nose-Donovanosis	1 in 32	Acquired Tertiary
6.	S.L.	20	M	Depressed bridge of the nose-Perforation of the palate-Gumma Skin	1 in 512	Congenital
7.	S.B.	58	M	Perforation of the palate	1 in 64	Acquired Tertiary
8.	P.V.	50	M	Perforation of the palate	1 in 32	Acquired Tertiary

Department of V. D. and Dermatology, Jawaharlal Institute of Post-Graduate-Medical Education & Research, Pondicherry-6, S. India.

\*Associate Professor of V. D. & Dermatology & Head of the Department

\*\*Registrar in V. D. & Dermatology.

Received for publication on 4-1-1971

On break up of these cases, Acquired Tertiary Syphilis - 6; Congenital syphilis-2; the following associated clinical features were present which further helped to diagnose the syphilitic aetiology :

- |   |       |
|---|-------|
| 1. Perforation of the palate                                | ... 4 |
| 2. Depressed bridge of the nose                             | ... 4 |
| 3. Gumma of the skin  | ... 2 |
| 4. Bone involvement tibia sterum<br>(Late Osseous syphilis) | ... 1 |
| 5. Aortic Aneurysm  | ... 1 |

To emphasize, clinical findings of four cases are presented below :

*Case No. 1* (Serial no. 3) M. P., male aged 45 years, reported with complaints of nasal ulceration of 5 months duration. One year before the onset of nasal ulceration, patient had ulcer penis which healed by itself.

*Physical Examination* : Examination of the nose showed perforation involving whole of the septum except a thin bar at the middle. Floor of the right nostril showed granulomatous ulceration. Tip of the nose was infiltrated and depressed. No ulcer or perforation seen in the oral cavity.

*Investigations* : Blood V.D.R.L. test was 1:256 positive. Cerebro spinal fluid examination showed 2 cell per cu. m.m., 20 mgms% proteins and negative V.D.R.L. test. X-ray skull showed absence of nasal septum in the middle.

Photograph No. 1 Perforation involving the whole of nasal septum except thin bar in the middle.

*Case No. 2* (Serial no. 4) M., female aged 16 years, reported with complaints of nasal ulceration of six months duration and ulcer in the mouth of five months duration. Patient denied any history of previous venereal disease.

*Physical Examination* : Examination of the nose showed destructive ulceration of nasal cartilage with perforation. Examination of oral cavity showed single painless ulcer in the right upper half of the hard palate. No perforation of palate was noticed clinically.

*Investigations* : Blood V.D.R.L. test was 1:16 positive. Cerebro spinal fluid examination showed 1 cell per cu. m.m. 20 mgms% proteins and negative V.D.R.L. test. X-ray hard palate showed erosive changes in the hard palate.



Photograph No. 2 (a) Complete destruction of nasal cartilage by granulomatous ulceration extending from nose down to the upper lip.



(b) Oral cavity showing perforation of palate at the junction of hard and soft palate.

**Case No. 3:** (Serial no 6) S. L. male aged 20 years, reported with complaints of destructive ulceration of nose with foul smelling discharge of six months duration.

**Physical Examination:** Examination of the nose showed complete destruction of nasal cartilage by granulomatous ulceration extending from the nasal cartilage down to the upper lip. Purulent post nasal discharge was present. Examination of oral cavity showed perforation of palate at the junction of hard and soft palate on the Right side. Gen tal examination revealed a scar in the fraenum of penis.

**Investigations:** Blood V.D.R.L. test was 1:512 positive. Cerebro spinal fluid examination showed 1 cell per cu. m.m., 20 mgms% proteins and negative V.D.R.L. test. X-ray nose lateral view showed complete absorption of the nasal cartilage.

Photograph No. 3 (a) Ulcer in the right upper half of hard palate.

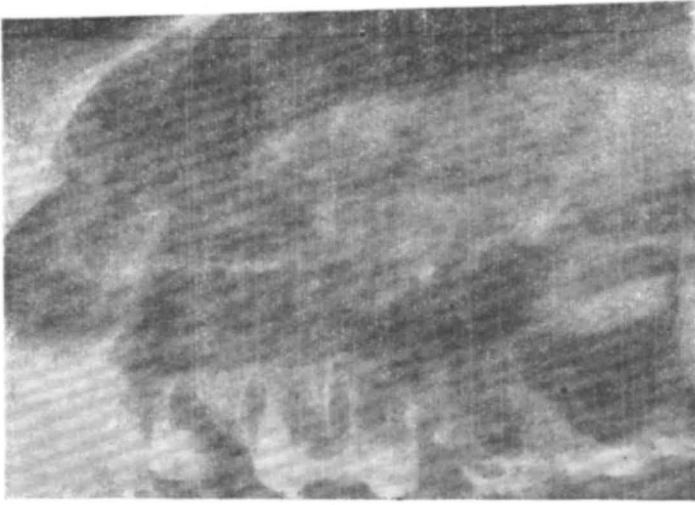
(b) X-ray hard palate showing erosive changes in the hard palate.

**Case No. 4:** (Serial no. 7) M, male aged 40 years, reported with complaint of regurgitation of food through the nose of 3 years duration. Patient had ulcer penis twenty years back which healed by itself.

**Physical Examination:** Atrophic papery scars seen over the medial side of thigh, right popliteal fossa and over the chin. Examination of the nose showed scarring of the tip of the nose and septal cartilage was absent. Posterior rhinoscopy revealed absence of uvula.

**Investigations:** Cerebro spinal fluid analysis showed proteins 28 mgm% V. D. R. L. and cells absent. X-ray chest left anterior oblique view showed dilatation of aorta and arch. No calcification was present.

**Discussion:** Syphilitic Perforation of the septum is said to be rare (Watkyn Thomas<sup>5</sup> - 1953 and Deweese & Saunders<sup>2</sup> - 1968). Since the condition is usually symptomless except in early cases when a small hole may produce whistling sound, patients never come with any complaint nor are they aware of the existence of such a hole in the septum.



Photograph No. 4 X-ray chest left anterior oblique view showing dilatation of arch and ascending aorta. No calcification

(Some figures are omitted)

During this study, eight cases of syphilitic perforation of the septum were discovered during routine examination. However these cases also showed other manifestations of syphilis which could draw our attention like perforation of the palate, depressed bridge of the nose, gumma of the skin and aortic aneurysm which coupled with positive V. D. R. L. helped to clinch the diagnosis. However in two of the cases, perforation was so extensive as to destroy the whole of cartilaginous part of the septum leaving only the bony part behind. Dutta et al<sup>3</sup> (1965) could only find a solitary case of perforation of the nasal septum in their study of 88 cases of late skeletal lesions possibly because it was a retrospective study. It is therefore stressed that perforation of the nasal septum is of great significance in the diagnosis of late syphilis and this should be particularly looked for while examining the cases suspected of late syphilis.

**Summary:** Eight cases of syphilitic perforation of the nasal septum are presented. Special attention is drawn to this clinical feature as a diagnostic sign of late syphilis. Out of the eight cases two belonged to congenital syphilis. Other associated features like perforation of the palate, depressed bridge of the nose, gumma of skin and bones do help to draw attention to this curious clinical entity.

**Acknowledgement:** We are grateful to the Principal, Jawaharlal Institute of Post-Graduate Medical Education and Research, Pondicherry for permission to publish this paper and to utilise hospital records.

#### REFERENCE

1. BEDI, B. M. S., KAKAR, P. K. and SOOD, V. P. : "Study on Perforation of the Palate", *Ind. J. Derm. & Vener.*, 35: 297 (1969).
2. De WEESE DAVID, D. and SAUNDERS WILLIAM, H. : "Text Book of Otolaryngology", Third Edition, p. 200-201, The C. V. Mosby Company, St. Louis (1968).
3. DUTTA, A. K., MITRA, B. L. and GHOSH, S. : "Skeletal manifestations of Late Syphilis", *Ind. J. Derm. & Vener.*, 31: 118, (1965).
4. KAKAR, P. K., BEDI, B. M. S., SOOD, V. P. and AURORA, A. L. : "Scleroma in Delhi Area", *Ind. J. Derm. & Vener.*, 35: 252 (1969).
5. WATKYN-THOMAS F. W. : "Diseases of the Throat, Nose and Ear", First Edition, p. 353-354, H. K. Lewis & Co. Ltd., London (1953).