"STUDY ON THE PERFORATION OF PALATE"

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Perforation of palate is an interesting finding which may pose a diagnostic puzzle. Because of the varied causes which could be responsible for this condition, it may provide a meeting ground for the specialists from multiple disciplines.

Perforation of the palate may be developmental, traumatic, syphylitic, tubercular, neoplastic or may follow gun bullets or pieces of sharp objects. The aetiology of the perforation of the palate may be really problematic and following conditions should be kept in mind in the differential diagnosis :—

1. congenital malformation. 2. syphilis, congenital syphilis acquired tertiary syphilis. 3. scleroma, 4. malignancy, 5. tuberculosis, 6. trauma and foreign bodies, 7. yaws, 8. gangosa, 9. maggots, 10. midline granuloma, 11. idtopathic granuloma, 12. miscellaneous e. g. chronic osteomyelitis, rhinoliths, and chrome ulcer.

Our interest in this condition was aroused when many such cases of the perfortion of the palate which were labelled as syphilitic and referred to the department of Venereology but were subsequently found to have altogether a different aetiology.

It was planned to investigate each and every patient on the following lines and a collaborated study was undertaken with the department of otorhinolaryngology. Detailed history of the patient, a thorough clinical examination, blood, S. T. S. and biopsy for histopathology.

Break up of 20 cases seen during the year 1968 showed the following aetioiogial factors :—

Perforation of the Palate

		Total	Percentage
1. Syphilis Congenital	4	7	35
Acquired	3		
2. Scleroma		4	20
3. Malignancy		4	20
4. Congenital Malformation		3	15
5. Idiopathic Graunuloma		1	5
6. Operative defect		1	5
	Total	20	100

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However a sufficiently large number (35%) of these patients were found to be of syphilitic origin. Syphilitic perforation by and large is present in the central part of the bony portion of the palate (Fig. I A & B). It is usually single and invariably is clean and clear. Occasionally however the perforations may be multiple and may be present in the soft palate and even near the pillars.

In our series in 5 cases there was solitary perforation whereas two cases showed multiple holes. In 3 cases the perforation was present in the soft palate.

The age group of the 7 cases of syphilitic perforation is shown below :—

Age group	
10–20	4 congenital.
30–40	1
40–50	2 } 3 acquired tertiary.

which demonstrates that the congenital syphilitics are usually seen at earlier age group whereas the acquired tertiary syphilitics are found at later age group. The congenital syphilitics had the following associated features contributing to the diagnosis of congenital syphilis.

High arch palate 3, Sabre tibia 1, Rhagades 1,

The three cases of acquired tertiary syphilis had the history of sore penis in the past. The following associated features were present in this group to help in the diagnosis.

Perforation in the septum of the nose 2, aortic reguritation 1,

The four cases of scleroma constituted 20% of the coses seen in this study. All these patients showed extensive granulomatous infiltration with the involvement of the nose and pharynx. The perforations in all these cases were unhealthy characterised by dirty edges which were multiple and presented mostly in the soft palate. Two of these cases were associated with the external mutilation of the nose which clinically helped the diagnosis. The problem of scleroma and its dermatological association has already been published by us (Behl & Bedi–1966) and (Kakar et al 1969). The perforation of the palate in scleroma is rather rare and has been reported earlier (Bedi–1967). The histopathology of these cases of scleroma was characteristically diagnostic and showed the presence of Mickulics cells, plasma cells and round cell infiltration.

Out of the four cases of malignancy causing perforation of the palate in this study one was a case of carcinoma palate and three cases were of carcinoma maxillary sinus. The blood STS was negative in these cases and these could only be diagnosed by histopathology which showed well differentiated squamous cell carcinoma. This therefore underlines and emphasizes the importance of the biopsy in all cases of the perforation of the palate (Figs. 2, 3 and 4).

In three cases of perforation due to congenital malforation, the perforation was present from the early age and it was anteriorly situated in two cases while there was defect on the right side of the soft palate in the third case (Fig. 5). The associa-

ted harelip if present is an important contributory finding to help the diagnosis. One case encountered in our series was of idiopathic graunuloma (Fig. 6). In this particular case all the laboratory and histopathological tests available to us failed to pin point the diagnosis and every time the biopsy report turned cut to be non-specific graunuloma. The last case (Fig. 7) shows an operative defect following total maxillectomy. The history of trauma whether accidental or operative must be taken to facilitate the diagnosis. Children fall while playing with pointed sticks or umbrella handles and perforate the palate. X-ray should always be taken in traumatic injuries as foreign body may still be present. The other causes of the perforation of the palate already enumerated have not been encountered in the present series of cases. Conrad (1968) has reported a case of rhinolith perforating hard palate. These rare causes of perforation palate should always be kept in mind before we labal it as idiopathic.

It is not the purpose of this paper to discuss the treatment and management of the perforation of the palate. However it may be mentioned that the management depends upon the aetiology. In congenital malformation plastic repair at an early age shall prevent regurgitation and changes in the voice. Antisyphilitic treatment may help in the syphilitic perforation and complete fibrosis may occur but when the perforations are multiple even surgical repair may not be possible. Moreover recurrence may occur. Rehabilitation of such cases with dental prosthesis had been undertaken as ideal management in such cases. The same however shall be published in a later communication (Bedi & Upadhaya). Streptomycin and tetracycline are the chemotherapeutic measures for treatment of scleroma but complete reunion is rare. One may have to resort to surgical or dental prosthesis for the same. Malignancy has to be tackled with radiotherapy and surgery.

Study on 20 cases of perforation of the palate is being presented. The break up of the cases showed the various aetiological factors as syphilis-7, sclaroma-4, malignancy-4, congenital malformation-3, idiopathic graunuloma-1 and operative defect-1. The study emphasizes the role of biopsy and other investigations to elucidate the aetiology of perforation of the palate in a particular case. The treatment and management is discussed briefly. The role of rehabilitation by dental prosthesis is being employed and shall be presented in a later communication.

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