

AN UNUSUAL PRESENTATION OF NOMA : A CASE REPORT

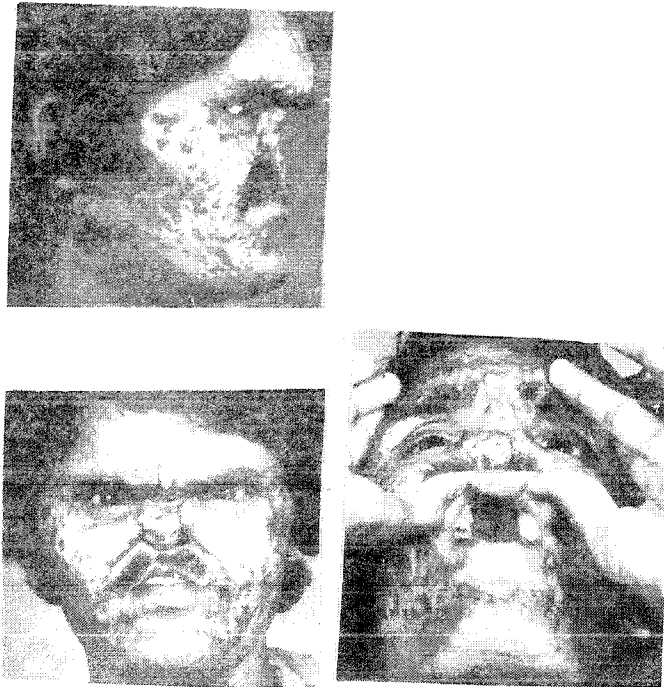
Dr. Arshad H. Khan, M.S., M.Ch.
Prof. Massod H. Khan, M.S., M.S.
Dr. Asif Masood, M.S.
Dr. Khursheed Ahmad, M.S., (M.Ch.) T.

ABSTRACT :

A rare case of loss of palate (Soft & hard including the premaxilla) and total loss of nasal septum (cartilagenous and bony) occurring in childhood (6 years age) during the course of exanthematous fever (Small pox) is presented.

INTRODUCTION

Cancrum oris, is an acute, fulminating, toxic, progressive gangrenous process of the orofacial tissues, usually occurring in debilitated & malnourished children. The disease is of acute onset & if the patient survives, disabilities due to scarring and necrosis result. The disease is considered to be associated with acute fusospirochaetal infection due to *Borrelia vincenti* and *Bicillus fusiformis* Emstie, 1963, although the anaerobic *Bacterioides melanogenicus* are also implicated.



Photograph showing :

- i) Patient in profile.
- ii) Front view.
- iii) Total absent of hard and soft pleate.

CASE REPORT

A 35 year old male patient presented with deep wells over the skin of the face, deformity of the nose and a huge defect in the oral cavity and with nasal regurgitation of liquids and altered speech.

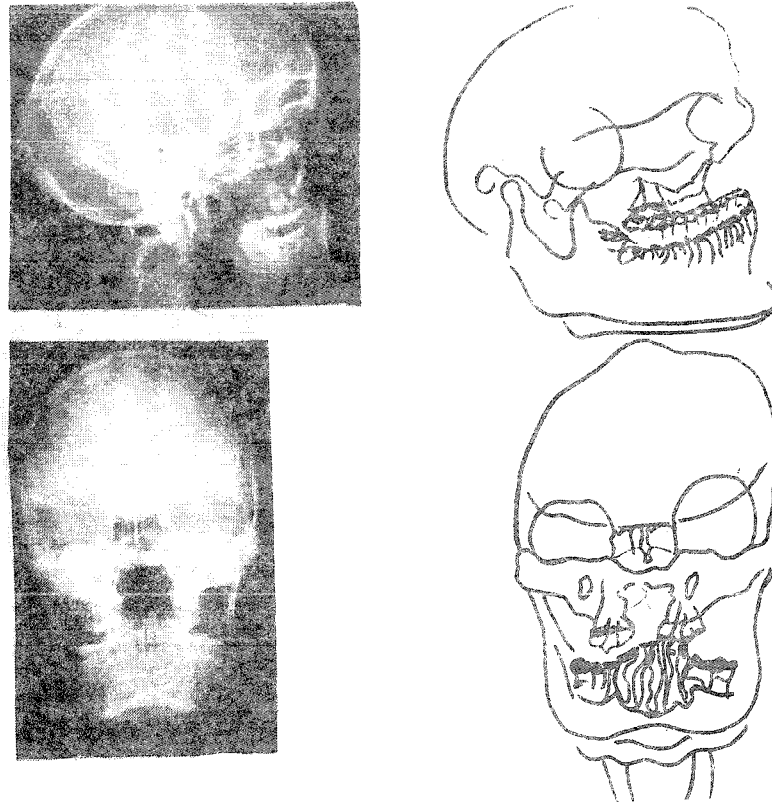
Past history of the patient revealed that at the age of 6 years he developed an exanthematous fever (small pox). During the course of the illness, oral cavity was involved, eventually leading to complete destruction of the palate and nasal septum.

On examination the patient was of average build. Deep pox marks were present all over the face. Due to the loss of the columella and total loss of septum, the dorsum of the nose had collapsed and its tip was up turned. Oral cavity showed total loss of soft and hard palate including the premaxilla forming a total

naso-oral fistula. Profile of face showed relative prognathism due to retruded upper lip because of loss of premaxilla, and hypoplastic maxilla.

X-ray face A-P view showed a midline skeletal defect involving central maxilla and hard palate. Maxillary sinuses were reduced to slit like air spaces. X-ray face lateral view showed absence of nasal bones. (Mandible was within normal limits according to the age and height of the patient with retruded small size maxilla).

Patient was operated under general anaesthesia and the upper gingivo-buccal sulcus was created and split skin grafted. Later a permanent external prosthesis was fitted to fill the defect with a nasal extension for nasal septum to improve Nasal profile.



Sketch and Radiographs showing

- i) Absent nasal bones and prognathism-Grade-I.
- ii) Absent maxillary sinuses and total loss of hard palate in A. P. view.

DISCUSSION

The etymology of the term "noma" is found in a Greek word meaning "to devour". It is a rapidly progressive necrosis of soft tissues and bones of the mouth and face, and, less commonly at other sites, such as chest limbs or genitalia. Commonest lesions are in the soft-tissue of the lip and oral commissure (Durring 1973).

Yohara & Knapp (1969) suggested that a distinct pattern characterises noma. It is initiated by acute necrotizing ulcerative gingivitis (ANUG), which leads to acute Necrotizing ulcerative mucositis (Vincent's angina), under the influence of local and systemic factors. Gangrenous stomatitis,

agranulocytic ulcerations and deep necrotizing fusospirochetal infections eventually ensue. Areas of necrosis and gangrene result from vascular thrombosis. Bone is exposed by soft tissue necrosis and usually sequesters within 3 weeks time due to thrombosis of periosteal vessel.

Although true or intra-articular ankylosis is infrequent, false or extra-articular ankylosis is common and results from the scarring of the soft tissues of the jaws.

In its fully developed state, few diseases can be confused with noma. However in adults, noma-like conditions have been associated with chronic lymphatic leukemia, agranulocytosis, use of

cytotoxic drugs and systemic diseases such as Kala-azar, tuberculosis, leprosy and syphilis.

Treatment of acute phase involves controlling the underlying disease, correcting nutritional deficiencies, establishing fluids and electrolyte balance and administering of antibiotics. Those who recover require reconstructive surgery to repair the loss of facial tissues and to deal with extra articular ankylosis.

Our patient was unique because the involvement was limited to palate (hard and soft), premaxilla, columella and nasal septum (cartilage and bone) without the involvement of soft tissues of the face. This is perhaps the first case of its kind with destruction of whole palate secondary to cancrum naris.

AUTHOR NAMES AND ADDRESS

Dr. Arshad Hafeez Khan, Lecturer.

Prof. Masood Hasan Khan, Professor.

Dr. Asif Masood, Clinical Registrar.

Dr. Khursheed Ahmad.

Division of Plastic & Reconstructive Surgery
Department of Gen. Surgery, Jawaharlal Nehru Medical
College A. M. U. Aligarh.

REFERENCES

1. Emstie R.D. (1963). Cancrum Oris. Dental Practitioner 13, 481-95.
2. **Oral and Maxillofacial Infections** (1987). W.B. Saunders Comp. Publication - 2nd edition.
3. Durrani K.M. (1973). **Surgical repair of defects from Noma.** Plastic and Reconstructive Surgery, 52, 629.
4. Uohara G.I. and Knapp M.J. (1967). **Oral fusospirochetosis and associated lesions** - Oral Surg. - 24, 113.