Journal of Bangladesh College of Physicians and Surgeons
Vol. 22, No. 3, September 2004

Benign Lesions Causing Facial Disfiguration

M ABDULLAH[a], M A CHOWDHURY[b], Y HAIDER[c]

Summary:

This retrospective study was aimed to find out diseases although benign but causing facial disfiguration. Lesions affecting the mid-face region were more (44.72%) in the study. Among 123 patients, the commonest disease was mandibular osteomylitis with discharging sinus due to dental infection. The disease profile included congenital anomalies, inflammatory as well as neoplastic lesions.

The treatment was surgical excision & repair with or without reconstruction. The outcome of the treatment was normal to accepted facial configuration in 92 (75%) patients. Cases with late presentation, extensive disease and fibrosis with repeated infection had residual deformity. The causes of late presentation are ignorance, poverty, lack of education, fear of surgery and overall poor facilities. In rural Bangladesh health education, poverty alleviation, adequate orientation, proper referral system and skilled manpower development will improve the situation.

(J Bangladesh Coll Phys Surg 2004; 22 :97-99)

Introduction :

During the course of evolution from the pre-human to modern humans, the face became smaller in relation to the overall size of the head[1]. While brain and braincase tripled in volume, the jaws became shorter and the teeth simpler in from and smaller in size. In consequence, the face receded beneath the forehead. Thus the modern human face exhibits an essentially vertical profile, in marked contrast to the protruding facial muzzle of the gorilla, the chimpanzee, and to a lesser extent, extinct hominids. The recession of the tooth-bearing portion of the jaws beneath the forehead left two distinctively human features: a prominent, projecting nose and a clearly defined chin[1].

The face grows more slowly than the nasal passages and the tooth eruption. Viewed in profile, the face at birth is less than one-fifth of the braincase; by adulthood it has increased to nearly half. Facial dimensions increase most in depth, next in height (length), and least in width; and in general to a greater extent in males than in females' .

In aesthetic point of view, human being do not want any scar in their face. Everyone is concerned with his or her impressive facial outlook. In this retrospective study, we found some diseases although benign causing facial disfiguration.

Materials & Method:

This retrospective study was done in the otolaryngology department of two-referral hospitals, Sir Salimullah Medical College & Mitford Hospital, and Institute of Post Graduate Medicine & Research, and a Private Hospital, ENT Hospital from January,1997 to December 2002. Patients admitted in the otolaryngology department with benign lesions having facial disfiguration were included in the study. Cases with malignant neoplasm were not included in the series.

Results:

Patients of second and third decade suffered than the other age groups.

Table I

Age incidence n=123

Age in years	No of Patients	Percentage
0-10	18	14.63
11-20	42	34.15
21-30	21	17.07
31-40	11	08.94
41-50	17	13.82
51 & above	14	11.38

a. Prof. Md. Abdullah FCPS, FICS, Principal & Professor of ENT, SSMC & Mitford Hospital, Dhaka

b. Dr. Md. Alamgir Chowdhury DLO, MS, Assistant Professor, ENT, SSMC & Mitford Hospital Dhaka

c. Dr. Yusuf Haider DLO, Assistant Registrar. ENT, SSMC & Mitford Hospital Dhaka

Address of Correspondence : Prof. Md. Abdullah FCPS, FICS, Principal & Professor of ENT, Sir Salimulla Medical College & Mitford Hospital Dhaka

Table II

Sex distribution n=123

Sex	No.	Percentage
Male	82	66.70
Female	41	33.30

Male and female ratio is 2:1

Table III

Lesions affecting different facial regions were as follows:

Affected area	No	Percentage
Lower face region	38	30.99
Mid-face region	55	44.72
Lateral face region	30	24.29

Table IV

Lesions affecting lower face region (Mandibular and associated area) n=38

Lesions	No	Percentage
Mandibular osteomylitis with sinus	21	55.26
Haemangioma of the lower lip	04	10.53
Adamantinoma of the mandible	12	31.58
Fibromyxoma of the mandible	01	02.63

Table V

Diseases of the mid-face region (nose and paranasal sinuses) n=55

Lesions	No	Percentage
Tumour		
Inverted papilloma	15	27.27
Nasopharyngeal angiofibroma	07	12.72
Ossifying fibroma	04	07.27
Haemangioma	02	03.64
Osteoma of the fronto-ethmoidal complex	03	05.45
Myxoma of the maxilla	01	01.82
Dental cyst	08	14.54
Granulmatous lesions		
Rhinosporidiosis	02	03.64
Giant cell reparative granuloma	01	01.82
Miscellaneous		
Fibrous dysplasia of maxilla	07	12.72
Frontal sinus mucocele	03	05.45
Frontal sinus osteomylitis	01	01.82
Nasal vestibulitis with stenosis	01	01.82

Table VI

Lesions in the lateral face region (parotid and auricular area) n=30

Lesions	No	Percentage
Parotid swelling	14	46.67
Pre-auricular sinus with scar	09	30.00
Keloid of the pinna	03	10.00
Perichonidritis of the pinna	03	10.00
Accessory auricle	01	03.33

Treatment of the cases was total surgical excision & repair with or without reconstruction.

Table VII

Results of surgeries (n=123)

Comments	No.	Percentage
Normal facial configuration	55	44.72
Accepted facial configuration	37	'30.18
Residual deformity	30	24.29
Mortality	01	0.81

Discussion:

This is a retrospective study aimed to observe how benign lesions causing facial deformity, which are preventable with early diagnosis and proper treatment. In our study it is revealed that second and third decades are more vulnerable of these diseases. Male outnumbered female and male female ratio was 2:1 in the study.

Lesions affecting the mid-face region (nose and paranasal sinus) were more in number 55 (44.72%), followed by 38 (30.99%) in lower face region (mandibular and associated area) and 30 (24.29%) in lateral face region (parotid and pre-auricular area) respectively.

Acquired diseases were common than congenital lesions in the series, which correlates with other studies[2,3,4]. Among disease profile mandibular osteomylitis with discharging sinus in the neck due to dental infection was highest in this observation, which has significant correlation with another report[3].

Treatment given was surgical in all the cases. Reconstruction was done according to the requirement[5]. The outcome of operations was normal

to satisfactory facial configuration in 92 (75%) cases. Residual deformity was noted in the rest of the cases. Patients with late presentation, extensive disease, previous inadequate removal, fibrosis due to repeated infection had residual deformity. Causes of late presentation are ignorance, poverty, lack of education, fear of surgery and overall poor treatment facilities outside the cities.

One patient died due to anaesthetic complication during surgery. He was a case of very extensive juvenile nasopharyngeal angiofibroma.

It is concluded from this study that early diagnosis and proper treatment of benign lesions can prevent facial deformity. Health education, adequate orientation, proper referral system and development of skilled manpower will improve the situation.

References:

1. Encyclopedia Britannica Library 2003, face pp…..
2. Jafek BW, Nahum AM, Butler RM and Ward PH. Surgical treatment of juvenile nasopharyngeal angiofibroma. Laryngoscope 1973; 83 : 707-720.
3. Carl W and Sullivan MA. Dental abnormalities & bone lesions associated with familial adenomatous polyposis: report of cases. Journal of American Dental Association 1989; 119 : 137-139.
4. Hjorting-Hansan E. Benign tumours of jaws. Current opinion of dentistry 1991, 1 : 296-304.
5. Bingham BJG and Hawthrone MR. Synopsis of operative ENT Surgery, Butterworth-Heinemann, First ed. Oxford, 1992; 313-324.