

## Annual Clinical Audit of Indoor, Dhaka Dental College and Hospital (January 2004 - December 2005)

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### Abstract

Clinical audit of indoor, Dept. of Oral and Maxillofacial Surgery, Dhaka Dental College and Hospital was performed for two years, January 2004 to December 2005. Data included all the indoor patients who were admitted for elective surgery. Day cases were excluded from the study. The audit was performed to assess the nature of pathology and number of patients admitted for surgical treatment.

**Key words:** clinical audit, number of patients, surgical pathology.

### Introduction

Clinical audit signifies many aspects of a hospital, like quality of treatment. Process of management, successful and failure of procedures, comparison between departments, hospitals and countries. The outcome is to improve overall management system of patients. Careful audit and self review outcomes throughout professional career is an essential part of maintaining surgical standards. If accurate records are kept it is not a great burden to produce monthly and annual figures on the activities of the department. Regular audit meeting provide a forum to discuss policy change and encourage a cohesive team approach. These are excellent and essential basis for continuing surgical education of all grades of surgeons<sup>4</sup>.

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This study focused on oral and maxillofacial pathological conditions and number of patients admitted in Dhaka Dental College and Hospital in two years.

### Materials and Methods

A retrospective study was performed in the department of Oral and Maxillofacial Surgery, Dhaka Dental College and Hospital. A total of 139 and 202 admitted patients in 2004 and 2005 respectively were studied. Records of admission, discharge, history sheet, operation and other management notes were studied.

### Results

In 2004 and 2005 a total of 139 and 202 patients respectively were admitted in indoor hospital with various pathologies.

**Table – 01:** Number of admitted patients

Year	Number
2004	139
2005	202
Total	341

**Table – 02:** Various pathologies

Pathology	2004 (n=139)		2005 (n=202)	
	No.	Percentage	No.	Percentage
Tumor	50	36	73	36
C.L.P	06	4	17	9
Trauma	34	25	62	30
Osteomyelitis, Cellulitis	17	12	22	11
TMJ ankylosis	6	4	8	4
Deformities, Oro-antral fistula, cysts & Others	22	16	16	8
P.O. Complications	4	3	4	2

Though number of patients increased in 2005 than 2004, the percentage of various pathologies was similar. Patients with tumours, benign and malignant were 36%. The second highest patient admission was with facial bone fracture (trauma). In each year, post operative complications was 3% and 2% respectively in two years.

**Table – 03: Tumour**  
 (36% of total pathology)  
 Benign 64%  
 -Mostly Ameloblastoma  
 Malignant 36%  
 -Mostly Squamous cell carcinoma



Most of the malignant tumours were squamous cell carcinoma. For approaching to the floor of the mouth, mandible and associated structures, the standard lip-splitting lower cheek flap incision was usually given. On the basis of extent and spread of tumour composite resection was done with or without reconstruction.

**Table – 04: Facial bone fracture**

Fracture	2004 (%)	2005 (%)
Mandible	27	37
Maxilla	6	3
Zygomatic bone alone	4	5
Maxilla, Zygomatic bone, nasal bone and others	4	10

(28% of total pathology)



Mandibular fracture due to road-traffic accident was the highest in both the years. Open reduction and internal fixation by titanium mini plate was done in most of the cases.

**Table – 05: Cleft-Lip and Palate**

	2004	2005
Unilateral cleft-lip	5	3
Bilateral cleft-lip	2	0
Cleft-lip with plate	1	2

  

Year	< 3 Years	> 3 Years
2004	3	1
2005	4	2

**Adult cleft lip**



Pre-operative



Past-operative

For correction of unilateral cleft lip Tennison's triangular flap, for bilateral cleft lip Veau-111 straight line closure was used and for palatal repair Wardill V-Y technique was incorporated into pushback technique.

### Discussion

Department of Oral and Maxillofacial Surgery, Dhaka Dental college and Hospital deals with wide range of diseases and surgical procedures from simple one like impacted wisdom tooth to complex and complicated ones like corrective jaw surgery, complex reconstructive surgery, neck dissection for metastatic malignant tumour, cleft lip and palate surgery etc. Pathologies like dentigerous cyst, odontogenic keratocyst or ameloblastoma are routinely managed by simple enucleation of the cyst to resection of the pathology with surrounding healthy bone, sometimes reconstruction plate with or without bone graft. Ameloblastoma was most common type of odontogenic tumour in many studies<sup>7</sup>. In the present study among all benign tumour ameloblastoma was higher in number, the high frequency of ameloblastoma was also consistent with data from Africa<sup>1,3,6</sup>.

Mandibular fractures are twice as common as fractures of the bones of the midface and comprise most of the traumatic injuries. The main causes of fracture of jaw bones and laceration of facial soft tissue worldwide are common due to road traffic accident and assault. Some studies have shown that assault is more common in developing countries, whereas traffic accidents are more common in developed countries<sup>5</sup>. In our study mandibular fracture was more and most of them were due to RTA. Most often open reduction and internal fixation of the jaw and facial bones were done together with soft tissue repair. Most of the temporomandibular joint ankylosis was managed by bilateral condylectomy and coronoidectomy with inter-positioning of temporalis muscle.

Though adult cleft lip is rare in developed countries, there were a good number of patients in the department who were treated as day-case and excluded from this study but out of 7 admitted patients with cleft palate 3 were adults and most of them were of poor socioeconomic condition. Post operative complications were seen few in number in case of reconstruction for malignant tumour, huge benign lesion, and temporomandibular joint ankylosis surgery.

Complications in reconstruction for bony defects following cancer resection was seen in studies primarily due to compromised vascularity of recipient site, radiation, tissue scarring and potential contamination of the wound with oral flora<sup>2</sup>. A number of 6 and 8 patients attended with TMJ ankylosis in 2004 and 2005 respectively of which most common contributing factor was trauma.

### Conclusion

In oral and maxillofacial surgery department most of the time patient attended with complication or in advanced stage, which sometimes made the treatment difficult. Very few patients stated about their attention on the diseases at the early stage. So it is time-demand to start Oral and Maxillofacial pathology screening throughout the country. Increased awareness of citizen about pathologic complication, importance of follow-up after surgery and improved referral system by medical and dental graduates can help in improving service in oral and maxillofacial surgery.

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