



## ENT Emergency in tertiary care Institute: An Experience.

### KEYWORDS

Abscess, epistaxis, emergency, foreign body.

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**ABSTRACT** ENT emergencies are common in all hospitals, so their early diagnosis and management will result in reduction in morbidity and mortality. Method & result: This study was conducted on 677 patients in GRMC, Gwalior. Male to female ratio was 1.29:1. The commonest emergency was emergency tracheostomy in 200 patients (29.54%), followed by epistaxis in 190 patients (28.06%). Conclusion: The commonest ENT emergency which were dealt in operation theatre were emergency tracheostomy, foreign body removal, abscess drainage so the residents should be well versed with these procedures.

### Introduction

ENT emergencies are common in all hospitals, so their early diagnosis and management will result in reduction in morbidity and mortality. The management of ENT emergencies require quick diagnosis and intervention along with significant financial resource for admission, investigations and management. Most of the emergency can be managed with local anaesthesia in the form of spray or injections. In this study we present data on different ENT emergencies which were dealt in one year at the tertiary level hospital.

### Material and Method

A retrospective study was conducted over one year period at tertiary care institute from Jan 2015 to Dec 2015, at GRMC, Gwalior.

Data was analysed according to type of emergency, sex, type and location of foreign body and their number etc.

ENT emergencies requiring medical management and which were managed in OPD / IPD dressing room were not included in this study.

### Result

#### Emergencies included in the Study are:

Type of emergency	Number of cases	Percentage
Emergency Tracheostomy	200	29.54%
Epistaxis	190	28.06%
Foreign body Throat	54	7.97%
Foreign body Bronchus	08	1.1%
Abscess	53	7.82%
Other emergencies	172	25.40%
Total	677	

#### Emergency Tracheostomy

Cause	Number	Percentage
Ca Larynx	70	35%
Cut Throat	40	20%
Diphtheria	5	2.5%
Others(Trauma)	85	42.5%
Total	200	

A total of 200 cases of emergency tracheostomy were done, out of which 85(42.5%) patients were of trauma who were dealt in trauma centre, 70(35%) patients were of Ca Larynx, and 40(20%) patients were of Cut Throat which required tracheostomy.

Mild cases of stridor were managed with treatment and if not relieved then emergency tracheostomy was done.

#### Epistaxis

Cause	Number	Percentage
Hypertension	55	28.9%
Trauma	100	52.6%
Post Surgery	5	2.6%
Bleeding Diathesis	20	10.5%
Others	10	5.2%
Total	190	

About 190 patients presented with the complaints of epistaxis in emergency and maximum number of cases were of trauma 100(52.6%) who were dealt in trauma centre, followed by patients with raised blood pressure 55(28.9%), and then with bleeding diathesis 20(10.5%), and then with other causes 10 (5.2%).

#### Foreign Body Throat

Type	Number	Percentage
Coins	39	72%
battery	1	1.8%
Locket	1	1.8%
Nail	1	1.8%
Button	1	1.8%
Others	11	20%
Total	54	

A total of 54 patients came to the emergency with the complaints of foreign body throat, of which 39 (72%) patients had complains of coin ingestion in throat, 1(1.8%) patient each of foreign body battery, locket, nail, and button had also reported, others comprised of 11(20%) patients.

In all the patients a detailed history was noted.

X-ray soft tissue neck AP and Lateral view was taken in all cases.

X-ray chest PA and Lateral oblique view was taken in se-

lected cases.

All the cases were done on priority basis with admission and emergency oesophagoscopy under GA.

#### Foreign Body Bronchus

Type	Number	Percentage
Plastic whistle	2	25%
Seed (custard apple)	2	25%
Ground nut	1	12.5%
other	2	25%
No foreign body	1	12.5%
Total	8	

A total of 8 patients underwent emergency bronchoscopy for their complaints of foreign body in airway, out of which no foreign body was visualized in 1(12.5%) patient and 2(25%) patients each had foreign body as seed, plastic whistle and in other category there were 2(25%) patients.

#### Abscess

Type of abscess	Number	Percentage
Septal Abscess	4	7.5%
Post Aural Abscess	11	20.7%
Retropharyngeal Abscess	3	5.6%
Peritonsillar Abscess	7	13.2%
Ludwigs Angina	15	28.3%
Neck Abscess	10	18.8%
Others	3	5.6%
Total	53	

A total of 53 patients of different types of abscesses had reported to the emergency, out of which 15(28.3%) patients had ludwigs angina, 11(20.7%) patients had post aural abscess, 10(18.8%) patients had neck abscess, 7(13.2%) patients had peritonsillar abscess.

Abscesses with fluctuation were incised and drained and pus sent for culture sensitivity, and third generation cephalosporin with metronidazole along with fluid replacement was started.

All patients underwent imaging to locate the collection in specific areas.

#### Others

Type	Number	Percentage
Cut throat	50	29%
Soft palate injury	5	2.9%
Foreign body nose	52	30%
Foreign body Ear	65	37.7%
Total	172	

Emergency admission in other category included foreign body in ears 65 (37.7%) patients had reported, 52(30%) patients of foreign body in nose, 50(29%) patients of cut throat, , 5 (2.9%) patients had palatal tear which was repaired.

#### Sex distribution of patients

Sex	Number of cases	Percentage
Males	382	56.4%
Females	295	43.57%
Total	677	

In the present study 382 (56.4%) were male patients and 295(43.57%) were females patients, which showed more male patients as compared to female patients.

#### Discussion

In this study 677 patients were dealt in emergency. Male preponderance was observed in the present study which is

consistent with studies done by other author (Kitcher et al 2007).

The commonest causes of ENT emergency in our study were emergency tracheostomy, epistaxis, and other type of causes which included foreign bodies in the ears and nose cases. Kitcher et al (2007) found foreign bodies as the commonest cause of ENT emergency followed by epistaxis and throat injuries. Patigaroo et al (2013) found commonest cause of ENT emergency were foreign bodies followed by trauma and abscess. Studies like Timsit et al (2001) showed epistaxis as the commonest cause on ENT emergency. Reasons for these differences might be difference in socio-economic factors and cultural environment of the patients. Reasons for more number of tracheostomy cases might be because of rise in trauma patients and CA larynx patients.

In present study ear and nasal foreign body were removed by simple technique using hook, forcep, and syringing. Hypopharyngeal and oesophageal foreign bodies were removed using direct laryngoscopy and hypopharyngoscopy. Tracheobronchial foreign bodies required rigid bronchoscopy for removal. Fretz et al (1987) also depicts technique for removal includes irrigation, suction, instrumentation or a combination of three. Lam & Wao (2001) has mentioned rigid endoscopy gives much better view of hypopharynx, cricopharynx, and first few centimeters of cervical oesophagus. Pasaglou & Dogan (1991) mentioned that rigid endoscope is traditionally believed optimal instrument for tracheo bronchial foreign bodies. But nowadays 3.6mm paediatric flexible bronchoscope are used (Lopez et al, 1993 and Swanson et al, 2002).

In our study patients of epistaxis were managed by different methods depending on the site and quantity of bleeding. Few cases required chemical or electro cautery and others required anterior nasal packing for control of bleeding. Kotecha et al, (1996) in his study managed epistaxis by direct control of bleeding points.

In present study trauma to head and neck, foreign body of ear and nose formed a large category in other emergencies. Repair of trauma patients, abscess drainage, emergency tracheostomy, and foreign body removal were done under local anaesthesia.

#### Conclusions

Common causes of ENT emergency were emergency tracheostomy, epistaxis, foreign bodies, trauma repair and abscess drainage which were mainly dealt by residents in operation theatres so they should be well versed with these procedures.

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