

Emergencies in Otorhinolaryngology at a Peripheral Hospital

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Abstract: While variety of the ORL disorders that present as emergencies are most of the time benign, some are critical requiring prompt diagnosis and treatment. There are those that are also potentially life threatening. We conducted a prospective a study comprising of 500 patients on the profile of ENT emergencies at a peripheral hospital. The findings in our study were consistent with other studies done else were and reported in the literature.

Keywords: ENT Emergencies, Epistaxis, Foreign Body, Trauma

1. Introduction

In recent years, there has been an increase in the number of patients seen in emergency/urgency services, and associated to this phenomenon, amongst other factors, there is the difficulty of access to medical specialties, long waiting queues and misinformation regarding the healthcare system [1, 2]. This is particularly true in a remote place like Kargil with not so much advanced medical facilities and difficulty in transporting patients to more equipped centres due to minimal road or air connectivity especially in the winter 5-6 months of each year when it remains cut off from the rest of the world due to heavy snowfall. Kargil a district with a population of some 1.75 lacs situated at an altitude of 2676 meters in the northern part of Jammu & Kashmir, India and is catered in the health services by a District Hospital. ORL emergencies are common in all communities, so we conducted this study to know the profile of ENT emergencies, their manageability and management options available at a peripheral hospital. This study comprised of 500 patients attending at District Hospital Kargil with ENT emergencies.

While variety of the ORL disorders that present as emergencies are most of the time benign, some are critical requiring prompt diagnosis and treatment. There are those that are also potentially life threatening. It is of note also that some of these emergencies are avoidable causes of death and disability. [3, 4.]

2. Observations and Discussion

Out of the total 500 patients we included in the study 308(61.6%) patients were male and 192(38.4%) patients were female which is consistent with studies done by other authors (Kitcher et al., 2007) [5].

Table 1: Age Distribution

| Age(yrs) | No of Pts | Percentage |
|----------|-----------|------------|
| 0-10 | 142 | 28.4 |
| 11-20 | 76 | 15.2 |
| 21-30 | 54 | 10.8 |
| 31-40 | 90 | 18 |
| 41-50 | 41 | 8.2 |
| 51-60 | 66 | 13.2 |
| 61-70 | 31 | 6.2 |

Maximum no of patients i.e. 142(28.4%) were in the age group of 0-10 years followed by 31-40 years i.e. 90(18%) patients and 11-20 years i.e. 76(15.2%) and so on (table 1).The age group 0-10 years was found to be most affected and foreign body was the commonest form of emergency encountered. It is known that this is the age range that is most affected by this condition [6, 7]

Table 2: Type of ENT Emergencies

| | | |
|--------------------------|-----|-------|
| Epistaxis | 238 | 47.6 |
| Foreign Bodies | 158 | 31.6 |
| Ear | 77 | 48.73 |
| Nose | 64 | 40.5 |
| Ingested | 14 | 8.86 |
| Inhaled | 3 | 1.90 |
| Trauma | 65 | 13 |
| Abscess | 26 | 5.2 |
| Upper airway obstruction | 3 | 0.6 |
| Post op haemorrhage | 8 | 1.6 |
| Others | 2 | 0.4 |

The Commonest cause for ENT emergency was epistaxis in 238 (47.6%) patients followed by foreign bodies in 158 (31.6%) patients and trauma in 65 (13%) patients (table 2). Kitcher et al., (2007) [5] in his study found foreign bodies most common ENT emergencies followed by epistaxis & throat injuries. Few studies like Timsit et al., (2001) [8] showed epistaxis most common emergency. The reason for epistaxis being the most common emergency in our study is that the study population residing at a high altitude area with maximum of dry weather conditions.

Table 3: Surgical Procedures Done for Emergencies and Type of Anaesthesia Required

| Diagnosis | Procedure | Anaesthesia | No of pts | Percentage |
|--------------------------|--|--------------------|-----------|------------|
| Epistaxis | AgNo3 cauterisation, Anterior nasal packing, Posterior nasal packing | Local anaesthesia | 238 | 47.6 |
| Foreign Bodies | | | 158 | 31.6 |
| Ear | Non invasive Removal | Local Anesthesia | 77 | 48.73 |
| Nose | Non invasive Removal | Local Anesthesia | 64 | 40.5 |
| Ingested | Rigid Hypopharyngoscopy, Oesophagoscopy | General Anesthesia | 14 | 8.86 |
| Inhaled | Rigid Bronchoscopy | General Anesthesia | 3 | 1.90 |
| Trauma | Repair | Local anaesthesia | 65 | 13 |
| Abscess | Incision Drainage | Local anaesthesia | 26 | 5.2 |
| Upper airway obstruction | Tracheostomy | Local anaesthesia | 3 | 0.6 |
| Post op haemorrhage | Cauterisation, vessel tying, packing | Local anaesthesia | 8 | 1.6 |

Commonest ENT procedure done in emergency was packing and cauterisation for epistaxis ie in 238 (47.6%) patients followed by removal of foreign bodies in 158 (31.6%) patients as shown in table 3. Kotecha et al., (1996) [9] in his study managed epistaxis by direct control of bleeding point. Tan & Calhoun (1999) [10] in his study used ribbon gauze impregnated with petroleum jelly or BIPP for nasal packing to tamponade the bleeding site. In present study Ear and Nasal foreign bodies were managed by simple removal techniques using hook, forceps, syringing. Hypopharyngeal & esophageal foreign bodies were removed using direct laryngoscopy and hypopharyngoscopy. Tracheobronchial foreign bodies were removed using rigid bronchoscopy. Fretz et. al (1987) [11] depicts techniques for removal includes irrigation, suction, instrumentation or a combination of the three. Lam & Wao (2001) [12] has mentioned rigid endoscopy gives a much better view of hypopharynx, cricopharynx and first few centimeters of cervical oesophagus. Pasaglou & Dogan (1991) [13] mentioned that rigid endoscope is traditionally believed optimal instrument for trachea bronchial foreign bodies'. But nowadays, standard 3.6mm paediatric flexible bronchoscopes are used (Lopez et al., 1993 and Swansar et al., 2002) [14, 15]. In present study, trauma to head and neck, abscess and nasal bone fracture formed another large category. Trauma, abscess, nasal fracture in most case was managed under local anesthesia. In our study tracheostomy for upper airway obstruction was done in 3(0.6%) patients. Paul (2008) [16] states upper airway obstruction as one of the indications of tracheostomy. General anaesthesia in our study was required in 17 (3.4%) patients rest all procedures were done under local anaesthesia. Bleach et al., (1994) [17] in his study found general anesthesia was required in 14% which was close to our study.

3. Conclusion

Common cases of ENT emergencies are epistaxis, foreign bodies, trauma, abscess etc. One fifth cases are managed under GA. simple removal methods using (hook, syringing), Hypopharyngoscopy, bronchoscopy, incision and drainage, primary repair and tracheostomy are common procedures for emergency management.

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