

CLINICAL PROFILING OF NONTRAUMATIC ENT EMERGENCIES IN TERTIARY CARE CENTRE

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ABSTRACT

Background: Non-traumatic ENT emergencies encompass a wide range of acute conditions that may threaten airway, swallowing, vision, and other vital functions. Knowledge of their clinical profile is important for planning emergency services. This study evaluated the demographic characteristics, clinical spectrum, management, and outcomes of nontraumatic ENT emergencies at a tertiary care centre. **Materials and Methods:** A descriptive cross-sectional study was conducted with 169 patients between May 2023 and June 2024. Patients presenting with nontraumatic ENT emergencies were enrolled after providing informed consent. Clinical details, investigations, management, and outcomes were documented using structured data collection forms. The emergencies encountered include stridor, foreign bodies, deep neck space infections, acute invasive fungal sinusitis, epistaxis, and temporomandibular joint dislocation. **Results:** Most patients were aged ≥ 45 years (67%), and adult men comprised the largest group (58%). Noisy breathing (50%) and foreign body sensation or ingestion (31%) were the leading presenting complaints. Stridor was the commonest emergency (52%), followed by foreign bodies (34%) and deep neck space infections (8%). Tracheostomy was the most commonly performed procedure. Among stridor cases, 89% had malignant aetiologies, with laryngeal carcinoma being the predominant cause. Foreign bodies were most commonly located in the cricopharynx and upper oesophagus. Most patients required inpatient management (84.6%), and diabetes mellitus was the predominant comorbidity among patients with deep neck space infections and acute invasive fungal sinusitis. Most patients remained on follow-up, whereas mortality was observed in a small proportion of patients. **Conclusion:** Malignancy-related stridor was the predominant nontraumatic ENT emergency. Early recognition, timely intervention, multidisciplinary care, and adequate tertiary care facilities are essential for improving patient outcomes.

INTRODUCTION

Emergency presentations constitute a major component of healthcare services worldwide and often require rapid diagnosis and early intervention to prevent serious complications. Among these, ear, nose, and throat (ENT) emergencies are particularly important because they can affect vital functions such as breathing, swallowing, vision, hearing, and speech. Owing to the complex anatomy of the head and neck region, delay in recognition or treatment may result in morbidity and, in severe cases, death. ENT emergencies continue to represent a significant challenge in emergency healthcare and commonly require appropriate specialist management.^[1,2] Non-traumatic ENT emergencies comprise a wide range of acute conditions occurring in the absence of

external injury. Their clinical presentation varies from relatively minor disorders to life-threatening situations demanding immediate intervention. Common conditions include epistaxis, acute upper airway obstruction and stridor, deep neck space infections, foreign body aspiration or ingestion, and acute invasive fungal sinusitis.^[3-5] Although these disorders differ in severity, many share the potential for rapid deterioration if diagnosis and treatment are delayed.

Epistaxis is one of the most common ENT emergencies. While most cases can be managed conservatively, severe bleeding may require specialist intervention, nasal packing, endoscopic procedures, or surgical management. Airway emergencies demand even greater urgency. Conditions such as Ludwig's angina, retropharyngeal

abscess, and other deep neck infections can progress rapidly, resulting in airway compromise and respiratory distress. These situations often require coordinated multidisciplinary care involving airway assessment, antimicrobial therapy, and surgical intervention when indicated.^[3-5]

Deep neck space infections continue to pose a significant clinical challenge because of their association with airway obstruction, sepsis, and mediastinal spread. Foreign body aspiration or ingestion remains a common emergency, especially among children, and may present either with respiratory distress or with delayed symptoms. Acute invasive fungal sinusitis is another important emergency, particularly among immunocompromised individuals, because of its rapidly progressive nature and possibility for orbital or intracranial complications. Failure to identify and manage these conditions appropriately can result in serious complications.^[6,7]

The epidemiological profiles of ENT emergencies vary widely across regions and healthcare settings. Previous studies have reported that ENT emergencies constitute a proportion of specialty emergency consultations, with common presentations including epistaxis, foreign bodies, infections, and airway-related disorders.^[1,2] Presentation patterns are influenced by factors such as age, socioeconomic status, healthcare accessibility, referral practices, and regional disease prevalence. Children more commonly present with foreign bodies and acute infections, whereas older adults are more likely to develop airway compromise and severe infective conditions.^[8,9]

Despite many literatures on ENT emergencies, data from South Indian tertiary care centres remain limited. Regional differences in healthcare-seeking behaviour, referral pathways, and disease patterns may influence the spectrum of emergencies encountered. Tirunelveli Medical College Hospital serves as a major tertiary referral centre in southern Tamil Nadu. Evaluating the demographic characteristics, clinical presentations, management approaches, and outcomes of non-traumatic ENT emergencies in this setting may provide valuable information for improving emergency care services and resource planning in the future.

Aim

This study aimed to investigate the clinical and demographic patterns, management, and outcomes of non-traumatic ENT emergencies at Tirunelveli Medical College Hospital.

MATERIALS AND METHODS

This descriptive cross-sectional study was conducted among patients presenting with non-traumatic ENT emergencies at Tirunelveli Medical College Hospital from May 2023 to June 2024. Ethical approval was obtained from the Institutional Ethics Committee,

and written informed consent was obtained from all participants before their inclusion in the study.

Inclusion and Exclusion criteria

This study included all patients presenting to the emergency department, triage, and outpatient department with nontraumatic ENT emergencies requiring intervention within 24 h of admission during the study period. Patients with traumatic ENT emergencies were excluded from the study.

Materials

The materials used in the study included a structured data collection sheet for recording patient demographics, detailed medical history, comorbidities, clinical findings, pathological and radiological investigations, management details and clinical outcomes.

Sampling Methods

Probability, convenience, and purposive sampling methods were used for sample collection.

Methods

The maximum number of patients was included in the study for better statistical analysis. All patients who fulfilled the inclusion criteria during the study period were enrolled in the study. After obtaining informed consent, demographic details, clinical presentation, comorbidities, laboratory and radiological investigations, management provided, and patient outcomes were recorded on a data sheet. The spectrum of nontraumatic ENT emergencies included aerodigestive tract foreign bodies, ear foreign bodies, stridor, epistaxis, deep neck space infections, acute invasive fungal sinusitis, and temporomandibular joint dislocation. A total of 169 patients with non-traumatic ENT emergencies were included in the study.

Data Analysis: Data were presented as frequency and percentage.

RESULTS

Among the 169 patients included in the study, the majority belonged to the ≥ 45 years age group [113, 67%], followed by those aged 19-44 years [28, 17%], 0-12 years [25, 15%], and 13-18 years [3 (2%)]. Adult males comprised the largest population of patients (98 [58%]), followed by adult females (46 [27%]), male children (15 [9%]), and female children (10 [6%]).

Noisy breathing was the most common presenting complaint, reported by 86 (50%) patients, whereas foreign body sensation or ingestion was observed in 53 (31%) patients. Facial and neck swelling were each noted in five (3%) patients, whereas nasal bleeding occurred in four (2%) patients. Swallowing difficulty, ear pain, and decreased/loss of vision were reported by three (2%) patients each. Poisoning, cough with chest pain, nasal obstruction, and odynophagia/throat pain were each observed in two (1%) patients. Ear discharge and inability to close the mouth were the least common complaints, each occurring in one (0.5%) patient.

Stridor was the most common non-traumatic ENT emergency, in 89 (52%) patients, followed by foreign body-related emergencies in 58 (34%) patients. Abscess and deep neck space infections were identified in 13 (8%) patients, whereas acute invasive

fungal sinusitis was diagnosed in 5 (3%) patients. Epistaxis was observed in four (2%) patients, and temporomandibular joint dislocation was the least common emergency, occurring in one (1%) patient. [Table 1]

Table 1: Demographic characteristics, presenting complaints, and spectrum of non-traumatic ENT emergencies

Parameters		N (%)
Age group	0-12 years	25 (15%)
	13-18 years	3 (2%)
	19-44 years	28 (16%)
	≥45 years	113 (67%)
Sex distribution	Adult male	98 (58%)
	Adult female	46 (27%)
	Male child	15 (9%)
	Female child	10 (6%)
Chief complaints	Noisy breathing	86 (50%)
	Foreign body sensation/ingestion	53 (31%)
	Facial swelling	5 (3%)
	Neck swelling	5 (3%)
	Nasal bleeding	4 (2%)
	Swallowing difficulty	3 (2%)
	Ear pain	3 (2%)
	Decreased/loss of vision	3 (2%)
	Poisoning	2 (1%)
	Cough with chest pain	2 (1%)
	Nasal obstruction	2 (1%)
	Odynophagia/throat pain	2 (1%)
	Ear discharge	1 (0.5%)
	Inability to close mouth	1 (0.5%)
Emergency diagnosis	Stridor	89 (52%)
	Foreign body	58 (34%)
	Abscess/DNSI	13 (8%)
	Acute invasive fungal sinusitis (AIFS)	5 (3%)
	Epistaxis	4 (2%)
	TMJ dislocation	1 (1%)

One patient had both acute invasive fungal sinusitis and deep neck space infection; therefore, category totals exceed the overall sample size by one.

Foreign body-related emergencies predominated in the paediatric age group, with all 25 patients aged 0-12 years presenting with foreign bodies, and no case of stridor, abscess/DNSI, AIFS, epistaxis, or TMJ dislocation were noted. Among adolescents aged 13-18 years, only three emergencies were recorded, comprising one case each of stridor, foreign body, and abscess/DNSI. In the 19-44 years age group, foreign bodies remained the most common emergency [14 cases], followed by stridor [8 cases],

abscess/DNSI [2 cases], and epistaxis [1 case]. Patients aged ≥45 years were the majority of emergency presentations, with stridor being the predominant diagnosis [78 cases], followed by foreign bodies [17 cases] and abscess/DNSI [9 cases]. AIFS was observed exclusively in this age group [five cases], whereas epistaxis [three cases] and TMJ dislocation [one case] were in common. [Table 2]

Table 2: Age-wise distribution of non-traumatic ENT emergencies

Parameters		Stridor	Foreign body	Abscess/DNSI	AIFS	Epistaxis	TMJ dislocation
Age group	0-12 years	0	25	0	0	0	0
	13-18 years	1	1	1	0	0	0
	19-44 years	8	14	2	0	1	0
	≥45 years	78	17	9	5	3	1

Tracheostomy was the most commonly performed emergency procedure in 89 cases and was performed exclusively in adults, predominantly among males (69 cases) compared to females (20 cases). The next most common intervention was foreign body removal, which was performed in 58 patients, with a fairly even distribution between adult males (16) and females (17), and children were 25 in number. Incision and drainage for abscess and deep neck space infections were performed in 13 patients,

whereas endoscopic debridement for acute invasive fungal sinusitis was required in five patients, occurring more often in females (four cases) than in males (one case). Nasal packing was performed in four male patients, and the lone case of TMJ dislocation was managed by reduction.

Among foreign body emergencies, the cricopharynx and upper oesophagus were the most common sites, with 23 cases. Ear foreign bodies were the second most common, with 13 cases. Nasal foreign bodies

were identified exclusively in 11 children. Oropharyngeal foreign bodies were less common, with six cases equally distributed between adult men

and women. Bronchial foreign bodies were the least common, occurring in five patients. [Table 3]

Table 3: Distribution of procedures performed and site-wise distribution of foreign bodies according to age and sex

Parameters		Adult male	Adult female	Male child	Female child
Procedure	Tracheostomy	69	20	0	0
	Foreign body removal	16	17	15	10
	Incision and drainage	8	5	0	0
	Endoscopic debridement	1	4	0	0
	Nasal packing	4	0	0	0
	TMJ reduction	1	0	0	0
Site	Ear	3	5	3	2
	Nose	0	0	6	5
	Oropharynx	3	3	0	0
	Cricopharynx & upper esophagus	9	7	3	4
	Bronchus	1	2	2	0

Among the 89 patients with stridor, malignant causes predominated in 79 (89%) cases, whereas only 10 (11%) had non-malignant aetiologies. Most patients were male [69 (78%)], whereas 20 (22 %) were female. Carcinoma of the larynx was the leading cause of stridor, observed in 45 (51%) patients, followed by carcinoma of the hypopharynx in 18 (20%) and other head and neck malignancies in 16 (18%) patients. Among the non-malignant causes, post-thyroidectomy bilateral recurrent laryngeal nerve palsy was the most common [5 (50%)], while hair dye poisoning and subglottic stenosis each

contributed 2 cases (20%). Cerebrovascular accident was identified in one (10%) patient.

Most head and neck malignancy patients presented with stridor at the time of initial diagnosis [62, 78%], whereas 10 (13%) developed stridor during radiotherapy, and 7 (9%) presented with recurrent disease. On follow-up, 75 (84.3%) patients were under regular surveillance. Loss to follow-up occurred in 12.4% patients, while mortality was documented in three patients during study period. [Table 4]

Table 4: Distribution based on etiology, etiopathogenesis, pattern of presentation, and outcomes

Parameters		N (%)
Etiology of stridor	Malignant causes	79 (89%)
	Non-malignant causes	10 (11%)
Sex distribution (Etiology of stridor)	Male	69 (78%)
	Female	20 (22%)
Etiopathogenesis	Carcinoma larynx	45 (51%)
	Carcinoma hypopharynx	18 (20%)
	Other head and neck malignancies	16 (18%)
	Non-malignant causes	10 (11%)
	Post-thyroidectomy bilateral RLN palsy	5 (50%)
Non-malignant causes	Hair dye poisoning	2 (20%)
	Subglottic stenosis	2 (20%)
	Cerebrovascular accident	1 (10%)
	At diagnosis with stridor	62 (78%)
Pattern of presentation in malignancy	During radiotherapy	10 (13%)
	Recurrence	7 (9%)
	Follow-up	75 (84.3%)
Outcome (in stridor)	Lost to follow-up	11 (12.4%)
	Death	3 (3.4%)

Among the 79 malignant stridor cases, carcinoma of the larynx was the most common diagnosis, affecting 45 patients and showing a clear male predominance [39 (87%) males; 6 (13%) females]. Within this group, supraglottic carcinoma was more common than glottic carcinoma, with 31 and 14 cases, respectively. Hypopharyngeal carcinoma was the second most common malignancy, occurring in 18 patients, with males comprising 13 (72%) cases. Oral

cavity and oropharyngeal malignancies were observed exclusively in males [9 (100%)], whereas a single case of nasopharyngeal malignancy occurred in a female patient. Other malignancies, including upper oesophageal carcinoma, thyroid malignancy, and non-Hodgkin lymphoma, were observed in six patients and were more commonly observed in males [4 (67%)] than in females [2, 33%]. [Table 5]

Table 5: Sex-wise distribution of malignant causes of stridor

Site of Malignancy	Subsite	Male n (%)	Female n (%)
Carcinoma Larynx	Supraglottis	28 (90.3%)	3 (9.7%)
	Glottis	11 (78.6%)	3 (21.4%)
Carcinoma Hypopharynx	—	13 (72.2%)	5 (27.8%)

Oral Cavity/Oropharynx	—	9 (100%)	0 (0%)
Nasopharynx	—	0 (0%)	1 (100%)
Other Cancers*	—	4 (66.7%)	2 (33.3%)

*Note: Includes upper oesophageal malignancy, thyroid malignancy, and non-Hodgkin lymphoma.

Local anaesthesia was the most commonly used anaesthetic modality [108 (64%)], followed by general anaesthesia [27 (16%)], no anaesthesia [25 (15%)], and total intravenous anaesthesia (TIVA) [9 (5%)]. Consistent with the predominance of major airway and infective emergencies in our series, most patients required inpatient management [143 (84.6%)], whereas only 26 (15.4%) were treated on an outpatient basis. Among the 13 patients with DNSI/abscess, Ludwig's angina was the most frequent presentation [3 (23.1%)]. Quinsy,

retropharyngeal abscess, submandibular abscess, and septal abscess each accounted for 2 (15.4%) patients, while canine space and zygomatic abscess were least common [1 (7.7%) each]. Diabetes mellitus was the predominant comorbidity [7 (50%)], followed by no comorbidity [5 (35.8%)]. Chronic kidney disease alone and combined diabetes mellitus with chronic kidney disease were each observed in 1 (7.1%) patient. Notably, all patients with AIFS had underlying diabetes mellitus [5 (100%)]. [Table 6]

Table 6: Management Characteristics, Clinical Spectrum of Deep Neck Space Infections/Abscesses, and Comorbidity Profile of DNSI/Abscess and Acute Invasive Fungal Sinusitis

Variable	Category	N (%)
Anaesthesia type	Local anaesthesia	108 (64%)
	General anaesthesia	27 (16%)
	Total intravenous anaesthesia (TIVA)	9 (5%)
	No anaesthesia required	25 (15%)
Treatment setting	Inpatient management	143 (84.6%)
	Outpatient management	26 (15.4%)
DNSI/Abscess spectrum (n=13)	Ludwig's angina	3 (23.1%)
	Quinsy	2 (15.4%)
	Retropharyngeal abscess	2 (15.4%)
	Submandibular abscess	2 (15.4%)
	Septal abscess	2 (15.4%)
	Canine space abscess	1 (7.7%)
	Zygomatic abscess	1 (7.7%)
	Diabetes mellitus	7 (50%)
Comorbidities in DNSI/Abscess (n=14)	Chronic kidney disease	1 (7.1%)
	Diabetes mellitus + CKD	1 (7.1%)
	No comorbidity	5 (35.8%)
	Diabetes mellitus	5 (100%)

Outcome analysis showed all patients with foreign body emergencies, AIFS, epistaxis, and TMJ dislocation recovered or remained on follow-up [100% each]. In comparison, DNSI/abscess showed recovery in 11 (91.7%) patients, with 1 (8.3%) death.

Stridor demonstrated the least favourable outcome, with 75 (84.3%) patients recovering or remaining on follow-up, 11 (12.4%) lost to follow-up, and 3 (3.4%) deaths were observed on post CCRT follow up during study period. [Table 7]

Table 7: Outcome Profile of Non-Traumatic ENT Emergencies

	Recovered/Follow-up n (%)	Lost to follow-up n (%)	Death n (%)
Stridor	75 (84.3%)	11 (12.4%)	3 (3.4%)
Foreign body	58 (100.0%)	0	0
DNSI/Abscess	11 (91.7%)	0	1 (8.3%)
AIFS	5 (100.0%)	0	0
Epistaxis	4 (100.0%)	0	0
TMJ dislocation	1 (100.0%)	0	0

DISCUSSION

Older adults were the majority of patients in our study, differing from the younger population reported by Islam et al., who observed a mean age of 26.3 years among 496 ENT emergency patients, and Rijal et al., who reported a mean age of 32.96±23.63 years among emergency ENT-head and neck surgical patients.^[10,11] However, Sreekanth et al. similarly noted that stridor was the predominant emergency in geriatric patients.^[2] The male predominance in our study was consistent with previous reports by Raj et

al., who documented 66.95% males among 38,793 patients, Islam et al., who reported a male-to-female ratio of 1.9:1, and Praveen et al., who found 45 males and 5 females among stridor patients.^[1,10,12] Noisy breathing was the leading symptom in our series, unlike Raj et al., where epistaxis was 25.58% of emergencies, and Islam et al., who reported throat emergencies in 40.52% of cases, with inflammatory pharyngeal conditions comprising 46.27% of throat presentations.^[1,10] Stridor emerged as the most common emergency in our study, comparable to the findings of Sreekanth et al. and Praveen et al., who

reported malignancy in 44 of 50 stridor patients (88%), with hypopharyngeal carcinoma (46%), supraglottic carcinoma (22%), and glottic carcinoma (14%) being the major causes.^[2,12] Rai et al. also identified laryngeal malignancies as important contributors to airway emergencies.^[13]

Foreign body-related emergencies formed the second largest group and were predominantly observed in children, similar to the observations of Sreekanth et al. and Raj et al. reported that foreign bodies in the nose, ear, and oesophagus were responsible for 6.17%, 4.96%, and 3.12% of emergencies, respectively, while Islam et al. noted that foreign bodies in the throat and ear were particularly common in the paediatric age group.^[2,1,10] The cricopharynx and upper oesophagus were the most common sites of impaction in our study, consistent with established patterns of foreign body lodgment. Tracheostomy was the most commonly performed emergency procedure in our study. In contrast, Rijal et al. reported rigid esophagoscopy with foreign body removal as the most common emergency surgery (38.40%), followed by incision and drainage of abscesses (21.73%).^[11] Deep neck space infections in our study showed a pattern comparable to that reported by Gargava et al., who found odontogenic infection in 42.66% of cases and Ludwig's angina in 24.66% of cases, with surgical drainage required in 38% of cases and emergency tracheostomy in 12% of cases.^[14]

Most patients required inpatient management, reflecting the severity of airway and infective emergencies encountered at this tertiary care centre. Local anaesthesia was the most frequently used anaesthetic modality, corresponding to the large number of bedside and minimally invasive emergency procedures performed. Similarly, Islam et al. reported that most ENT emergencies were managed under local anaesthesia. Diabetes mellitus was the predominant comorbidity among patients with DNSI and was present in all patients with AIFS, emphasizing its role as an important risk factor for severe head and neck infections.^[10] Further, Jain et al. reported diabetes mellitus in 55.7% of patients with deep neck space infections and identified it as an important predisposing factor.^[15] These findings indicate that severe ENT emergencies often require hospitalization, prompt intervention, and careful management of underlying comorbidities.

Although acute invasive fungal sinusitis constitutes a small proportion of emergencies, its clinical significance is due to the need for repeated debridement and multidisciplinary care. Epistaxis was relatively uncommon in our study, unlike the findings of Raj et al., who reported epistaxis in 25.58% of all emergencies, and Islam et al., who found it to be 39.26% of sinonasal emergencies.^[1,10] Similarly, Muniraju et al. observed a male predominance (58.33%) and idiopathic aetiology in 30% of epistaxis cases.^[16] The lower frequency observed in our series may indicate the effective management of uncomplicated cases at secondary

care centres in Tamil Nadu. As most secondary care centres in Tamil Nadu are employed with adequate ENT specialists both in the government and private sectors, with only complex or recurrent cases probably being referred to tertiary institutions.

The overall outcome of non-traumatic ENT emergencies in the present study was favourable, with most patients recovering or remaining on regular follow-up after appropriate intervention. Mortality was observed in only a small proportion of cases and was primarily associated with advanced malignancy (CCRT complications) and severe infective conditions. These findings emphasize the importance of early diagnosis, timely referral, and prompt emergency management in improving patient outcomes and reducing complications associated with non-traumatic ENT emergencies.

CONCLUSION

Non-traumatic ENT emergencies comprise a diverse group of conditions that often require immediate recognition and interventions. In our study, stridor related to head and neck malignancies was the most common emergency, followed by foreign-body-related presentations. Management commonly involves emergency procedures, including tracheostomy, foreign body removal, incision and drainage, endoscopic debridement, and nasal packing. Deep neck space infections and acute invasive fungal sinusitis pose additional challenges because of their aggressive nature and the need for multidisciplinary care. Adequate infrastructure, specialist expertise, and coordinated management are essential for improving outcomes and minimising morbidity and mortality in non-traumatic ENT emergencies.

REFERENCES

1. Raj A, Wadhwa V, Jain A. Epidemiological profile of ENT emergencies: Our experience. *Indian J Otolaryngol Head Neck Surg* 2019; 71:301–4. <https://doi.org/10.1007/s12070-018-1284-9>.
2. Sreekanth G, Novshaba, Reddy LS, Bhushan IP. An overview of emergencies in otorhinolaryngology at a tertiary care centre, Telangana. *Indian J Otolaryngol Head Neck Surg* 2022; 74:5404–11. <https://doi.org/10.1007/s12070-021-02685-8>.
3. Desai B. Ears, nose, and throat. Nailing the Written Emergency Medicine Board Examination, Cham: Springer International Publishing; 2016, p. 467–516. https://doi.org/10.1007/978-3-319-30838-8_8.
4. Hahn J, Deitmer T, Löhler J, Datzmann T, Lehner R, Hoffmann TK. Emergencies in otorhinolaryngology: Diagnostic evaluation, assessment of urgency, and treatment. *Dtsch Arztebl Int* 2025; 122:533–40. <https://doi.org/10.3238/arztebl.m2025.0122>.
5. Diep J, Kam D, Kuenzler KA, Arthur JF. Emergent airway management of an uncooperative child with a large retropharyngeal and posterior mediastinal abscess. *A Case Rep* 2016; 6:61–4. <https://doi.org/10.1213/XAA.0000000000000267>.
6. Rana AK, Kumar S, Sharma R, Sharma VK. Presentations of pediatric emergencies in a tertiary teaching hospital in north India: An overview. *Indian J Otolaryngol Head Neck Surg*

- 2022; 74:6400–5. <https://doi.org/10.1007/s12070-019-01748-1>.
7. Olatunya OS, Adegbiyi WA, Olajuyin OA, Babatola AO, Komolafe AK. Paediatric otorhinolaryngology, head and neck emergencies at a tertiary health care centre in Nigeria. *Niger J Med* 2020; 29:137. <https://doi.org/10.4103/1115-2613.284876>.
 8. Banerjee A, Jafar AJN, Mukherjee A, Solomonides C, Witt E. ENT Surgery. Clinical SAQs for the Final FRCEM, Oxford University PressOxford; 2019, p. 95-C7. P235. <https://doi.org/10.1093/med/9780198814672.003.0007>.
 9. Dutta S, Halder D, Aggarwal N, Panja T, Ghosh T, Sinha R. Pediatric otolaryngological emergency: An experience from a tertiary care teaching institution at Kolkata, India. *Indian J Otolaryngol Head Neck Surg* 2018;70:490–4. <https://doi.org/10.1007/s12070-018-1490-5>.
 10. Islam MS, Islam MR, Siddique MA, Alam MR, Rahman MM, Afrin A, et al. Pattern of ENT emergencies in tertiary level hospital. *Sir Salimullah Med Coll J* 2022;30:67–74. <https://doi.org/10.3329/ssmcj.v30i1.59392>.
 11. Rijal KC, Gautam S, Ghimire B, Koirala KP, Khadka A, Raj Kafle B, et al. Characteristics and outcome of ear, Nose, Throat-Head and Neck Emergency Surgeries in a tertiary care center: An observational study. *J Coll Med Sci-Nepal* 2025;21:12–6. <https://doi.org/10.3126/jcmsn.v21i1.75465>.
 12. Praveen. Dr, Prasad AS Dr. Analysis of stridor in patients and impact of emergency tracheostomy. *Paripex Indian J Res* 2024;76–8. <https://doi.org/10.36106/paripex/6506736>.
 13. Rai DCS, Rai DS, Bhutia DTJ. Airway emergencies in ENT: A retrospective study in a tertiary care hospital. *JPTCP* 2024. <https://doi.org/10.53555/jptcp.v31i7.7090>.
 14. Gargava A, Raghuwanshi SK, Verma P, Jaiswal S. Deep neck space infection: a study of 150 cases at tertiary care hospital. *Indian J Otolaryngol Head Neck Surg* 2022;74. <https://doi.org/10.1007/s12070-021-02439-6>.
 15. Jain U, Luthra M, Bist SS, Kumar L, Agarwal VK. Predisposing factors and etiology of deep neck space infections – A hospital-based cross-sectional study. *J Pub Health Primary Care* 2024;5:143–8. https://doi.org/10.4103/jphpc.jphpc_21_24.
 16. Muniraju, Julie. Study of etiopathogenesis and management of epistaxis in tertiary care centre. *Int J Otorhinolaryngol Head Neck Surg* 2023;9:630–6. <https://doi.org/10.18203/issn.2454-5929.ijohns20232219.sss>.