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ENT Emergencies



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Ear, nose, and throat (ENT) conditions form a significant part of emergency surgical presentations. This overview will focus on:

24.1 Outer Ear

Trauma to the pinna is a common presentation. Haematomas should all be drained under local anaesthesia. The risk is of underlying cartilaginous necrosis. Antibiotics are recommended.

Lacerations should all be sutured in a single layer with the suture material traversing the skin and the perichondrium.

Foreign bodies in the ear canal are usually placed there by the patient. Occasionally insects may crawl into the canal. They should first be killed with a mineral oil. The foreign bodies should be removed under vision using micro-forceps or a right angle probe.

24.2 Middle Ear

Acute otitis media is a relatively common affliction in young children. The main clinical feature is pain and fever. It can be caused by both bacteria and viruses.

Treatment is primarily with antibiotics and decongestants. In some cases, it may progress to chronic otitis media. A rare complication is mastoiditis.

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Mastoiditis is a potentially serious condition. Initial treatment is with intravenous antibiotics and incision and drainage. This needs to be treated in a special centre where there is expertise with both mastoid surgery and intracranial surgery.

Intracranial complications include meningitis, cerebral abscess, and sigmoid sinus thrombosis.

Chronic otitis media is characterised by a chronic tympanic membrane perforation. Complications include pain, vertigo, sensorineural hearing loss, and facial palsy.

Treatment is both medical and surgical. Medical treatment consists of water precautions, topical antiseptic drops, hearing aids if required, and school assistance. Surgical treatment depends on the extent of disease but can include tympanoplasty to rectify the defect and mastoidectomy.

24.3 Nasal Fracture

Patients usually present with a history of trauma to the nose, profuse bleeding, and nasal deformity.

Initial treatment consists of;

- · Ice and analgesia
- · Exclude other facial, head, and neck fractures
- · Look for septal haematoma

Immediate reduction can be attempted with the use of local anaesthesia which can either be injected or by use of nasal packs soaked with lignocaine and adrenaline. The patient is reviewed after 7–10 days and if still deviated a further reduction is performed. The normal practice is a delay reduction after swelling has settled.

24.4 Epistaxis

Nosebleeds are more common in the young and in the elderly. Most are either in an anterior or a posterior location.

24.5 Anterior Epistaxis

- Occur in Little's area
- 90% of all epistaxis
- Mainly in children and young adults
- Can be due to local trauma
- · Desiccation of mucosa in drier months
- Irritants—sprays, illicit drugs

24.6 Posterior Epistaxis

- More common in the elderly
- 10% of all epistaxis
- Associated with coagulopathy, hypertension, atherosclerosis, and neoplastic processes
- More common in colder months with low humidity

24.7 Assessment

This should consider;

- · The amount, frequency, and precipitants
- · Whether anterior or posterior bleed
- · Any significant bleeding history including family history
- · Past medical history of hypertension, nasal surgery, and head injury
- Use of anticoagulants

24.8 Medical Management

Anterior bleeds in Little's area are usually due to capillary damage. These are usually well-controlled with local pressure. For recurrent bleeds cauterisation can be used. If there is a suspicion of a bleeding diathesis, this should be investigated.

Posterior bleeds are more problematic. Check the patient's blood pressure and if significantly elevated, consider pharmacotherapy. Often a single intramuscular injection of morphine is sufficient. If possible, urgently refer to an ENT surgeon. They have expertise in visualising the posterior nose and managing the bleed-ing points.

If no ENT services available, the best approach is to pack the nose. This can be done with anterior packing which involves a long ribbon gauze soaked in lignocaine and adrenaline and then inserted in the nasal cavity in layers. Commercial nasal tampons are available which are much easier to insert. Gently remove after 48 h.

Very posterior bleeding may not respond to this packing. An alternative technique is to insert a 12F Foley urinary catheter into the postnasal space and inflate the balloon with 7 mL of water. The area anterior to the balloons is then packed with ribbon gauze as described above. Gently remove after 48 h.

Prior to any attempt at packing the nose, the patient should have adequate analgesia and sedation.

If there is major bleeding which is not controlled with packing, then patients should be referred for selective embolisation if facilities are available. In severe lifethreatening situations, the external carotid artery should be tied off just above the level of the facial artery.

24.9 Facial Cellulitis

This is commonly due to Streptococcus or Staphylococcus. It can rapidly progress and should be treated as a surgical emergency.

The mainstay of treatment is with intravenous a penicillin/flucloxacillin combination. The main complication is the risk of spread to the cavernous sinus.

24.10 Peritonsillar Abscess(Quinsy)

Presentation

- 3–4 days after a sore throat
 - Unilateral throat pain
 - Fever
 - Palatal swelling
 - Trismus
 - Deviation and oedema of the uvula

Treatment

- · Intravenous penicillin, metronidazole, and steroids
- Incision and drainage of the abscess using local anaesthesia and a cruciate stab incision

24.11 Ludwig's Angina

This is a rapidly progressive cellulitis of the floor of the mouth. It is usually caused by a haemolytic Streptococcus and Bacteroides. It is more common in elderly debilitated patients and is usually precipitated by dental procedures. It can spread to all the neck spaces and is characterised by massive swelling of the neck and intraoral structures. These then expand backwards causing airway obstruction.

Patients should be commenced on intravenous antibiotics and admitted to the intensive care unit.

Treatment is urgent airway management. If possible, the airway should be protected with a nasotracheal tube, otherwise a tracheostomy should be performed. CT scan of the face and neck investigates for abscesses. Bilateral submandibular incisions to the skin and platysma muscle can be performed to help decompress the floor of the mouth.

24.12 Conclusion

Most ENT emergencies can be accurately diagnosed with a careful history and examination. It is important that the airway is protected and that infection is not allowed to spread to major structures.

All surgeons should be familiar with the techniques of both open and percutaneous tracheostomy.