

ENT DISEASES

ACUTE SUPPURATIVE OTITIS MEDIA (ASOM)

ASOM is caused by inflammation of the mucous membrane lining the middle ear cleft (consisting of the eustachian tube, tympanic cavity, mastoid antrum and mastoid air cells) produced by pus forming organisms.

SALIENT FEATURES

- Severe throbbing pain in the ear, difficulty in hearing, and rarely giddiness and excessive crying in children.
- Often bilateral in children, preceded by upper respiratory tract infection.
- Congestion and bulging of eardrum leading to perforation and discharge.

Treatment

Nonpharmacological

Steam inhalation and to keep the ear clean in case of pus discharge.

Pharmacological

1. For fever, Tab. Paracetamol 500 mg SOS (for details see section on Fever in Chapter 1).
2. Cap. Amoxicillin 500 mg 8 hourly for 7 days. In complicated cases and children <2 years, longer course, i.e. 10 days is given.
In Children: 20-40 mg/kg in 3 divided doses for 7 days.
Or
Cap. Amoxicillin 250-500 mg plus clavulanic acid 125 mg 8 hourly for 7 days.
Switch antibiotics, if no clinical improvement by 3rd day.
3. Xylometazoline HCl 0.1% 1-2 nasal drops in each nostril 1-2 times daily.
In children: (0.05%) 1-2 nasal drops 1-2 times daily.
Or
Oxymetazoline 0.05% 1-2 nasal drops in each nostril 2 times daily.
In children: (0.01%) 1-2 drops 2 times daily.

4. In case of ear discharge (due to rupture of tympanic membrane) add
Ear drops ciprofloxacin 2 drops three times a day.

Surgical treatment

Refer to an Otolaryngologist for myringotomy, if there is intense pain, bulging of the eardrum or persisting fever despite treatment.

Patient education

- Treat upper respiratory and sinus infections at the earliest.

Reference

1. Acute Otitis Media in Adults. In: Scott Brown's Otolaryngology. Booth JB (ed). Vol 3, 7th Edition, 2008; pp. 3385-3387.

CHRONIC SUPPURATIVE OTITIS MEDIA (CSOM) (TUBOTYMPANIC TYPE)

CSOM is characterized by the presence of a central perforation resulting from acute otitis media. It may present as an active disease when infection may occur through the nasopharynx or through the perforation thus causing ear discharge. In the inactive disease, the only presenting feature is deafness.

SALIENT FEATURES

- Discharge—intermittent, copious purulent during acute exacerbation.
- Deafness—usually conductive type.

Treatment

Nonpharmacological

Aural toilet by dry mopping or careful suction.

Pharmacological

Topical antibiotics:

1. Ciprofloxacin HCl 0.3% w/v ear drops 2-3 drops or Gentamicin ear drops 3-4 times daily for 2 weeks.
2. When ear infection is associated with marked inflammation, combine with Prednisolone 0.5% + Chloramphenicol 5% + Lignocaine 2% + Acetic acid 2% to be used as 3-4 drops 3-4 times daily for 2 weeks.
3. In case of profuse mucopurulent discharge and for any associated upper respiratory tract infection, give systemic antibiotics
Cap. Amoxicillin 750-1500 mg in 3 divided doses for 7 days.

In children: 20-40 mg/kg in 3 divided doses.

Or

In case of severe infection, Tab. Ciprofloxacin 250-500 mg 12 hourly for 7 days.

The choice of antibiotic depends on the culture and sensitivity report of the pus.

Surgical treatment

Once the ear is dry and any local nidus of infection has been treated, the ear can be taken up for myringoplasty after assessing the hearing status.

Patient education

- Explain the patient not to allow water or dust to enter the ear.
- Explain the patient to take immediate treatment in case of upper respiratory tract infection.
- Do not instill oil, if there is a discharge from the ear or if the patient is known to have perforation of eardrum.

Reference

1. Chronic Suppurative Otitis Media. In: Scott Brown's Otolaryngology. Booth JB (ed) Vol 3, 7th Edition, 2008, pp. 3395-3445.

OTITIS MEDIA WITH EFFUSION

It is characterized by the presence of non-purulent fluid in middle ear cleft which may be because of eustachian tube dysfunction, unresolved otitis media or allergy.

SALIENT FEATURES

- Deafness—conductive type and tinnitus.
- Otoscopy may show retraction of the drum or air fluid level and air bubbles behind the drum.

Treatment

Pharmacological

1. Cap. Amoxicillin (as trihyd 500 mg) with Clavulanic acid (as pot. Salt) 125 mg, twice daily before meals for up to 21 days.
In children: 25 +3.6 mg/kg daily in two divided doses.
2. Tab. Pseudoephedrine 120 mg 8 hourly for 3 days.
In children: 1-2 mg/kg twice daily.
3. Xylometazoline HCl 0.1% 1-2 nasal drops in each nostril 1-2 times daily.
In children: (0.05%) 1-2 nasal drops 1-2 times daily.
Or
Oxymetazoline 0.05% 1-2 nasal drops in each nostril 2 times daily.

Surgical

Surgical measures may be necessary, if patients do not respond to long-term pharmacological measures. Surgery may include myringotomy with or without grommet insertion, adenoidectomy, treatment for sinusitis and even mastoidotomy in refractory cases.

Patient education

- Do not instil oil in the ear.

Reference

1. Chronic Otitis Media. In: Scott Brown's Otolaryngology. Booth JB (ed) Vol 3, 7th Edition, 2008; pp. 3395-3445.

WAX

Wax (cerumen) is a mixture of the secretions of the ceruminous and pilosebaceous glands located in the cartilaginous portion of the external auditory canal.

SALIENT FEATURES

- Pain, deafness, tinnitus, vertigo and reflex cough.

Treatment

Pharmacological

1. If pain is severe, Tab. Ibuprofen 400 mg SOS.
In children: 20 mg/kg/day divided into 3 doses.
2. Wax softener (Turpentine oil–15%, Benzocaine–2.7%), Chlorbutol–5%, Paradichlorobenzene–2%) 3-4 drops, 3-4 times daily for 3-4 days before cleaning the ear when the wax is hard.

Followed by surgical removal (to be carried out by an otolaryngologist).

Syringing with sterile saline solution at body temperature pushed along the posterior wall of the meatus to take out the wax. The meatus should be mopped dry after syringing.

(Caution: If there is previous history of ear discharge or perforated drum, then instrumental manipulation with ring probe, hook or forceps and suction cleaning is advisable)

Patient education

- Wax is a normal secretion and provides protection to the eardrum and should be removed only if it disturbs hearing.
- Cleaning the ear with buds to be avoided as it can push the wax to the deeper canal.

Reference

1. Diseases of the External Ear. In: Logan Turner's Diseases of the Nose, Throat and Ear, 10th Edition, pp. 265-267.

OTOMYCOSIS

It is the fungal infection of the external auditory meatus seen more commonly in tropical and subtropical climates. The fungi commonly found are *Aspergillus niger* and *Candida albicans*. Otomycosis may develop as a primary infection or as a mixed infection with bacteria.

SALIENT FEATURES

- Itching with or without pain, grayish-white fungal debris with or without black specks and ear blockage.

Treatment***Nonpharmacological***

Regular ear toilet—by suction/dry mopping/instrumentation must be done prior to pharmacological treatment.

Pharmacological

1. Topical Clotrimazole as 1% powder or liquid 3-4 drops, 3-4 times a day to be instilled and continued for at least a week after clinical resolution of the infection.
2. Tab. Ibuprofen 400 mg as and when required.
In children: 20 mg/kg/day in 3 divided doses.
Or
Tab. Nimesulide 100 mg as and when required.

Patient education

- Ear is to be kept dry; entry of water into the ear should be prevented.

Reference

1. Otitis Externa and Otomycosis. In: Scott Brown's Otolaryngology. Booth JB. Vol 3, (ed) 7th Edition, 2008; pp. 3351-3357.

EXTERNAL EAR FURUNCULOSIS

It is due to staphylococcal infection of hair follicle in the outer cartilaginous part of the external meatus. It may be single or multiple. Abrasions facilitate infection, which is more common in diabetic patients. Careful history and local examination helps in differentiating it from mastoiditis.

SALIENT FEATURES

- Pain, tenderness, swelling, ear blockade.
- Regional lymphadenitis and sometimes discharge.

Treatment

Nonpharmacological

Local heat.

Pharmacological

1. 10% Ichthamol in glycerine soaked wick to be packed in the ear.
Or
Antibiotic steroid cream wick pack (Polymyxin B sulphate 500 IU, Neomycin sulphate 3400 IU, Zinc bacitracin 400 IU, Hydrocortisone 10 mg, per g) wick packing to be done on alternate day till swelling subsides followed by/or
2. Local ear drops (Polymyxin B sulphate 1000 U, Neomycin sulphate 3400 U, Hydrocortisone 10 mg/ml).
3. Systemic therapy with antibiotics (see section on Furunculosis of Nose)
4. Tab. Ibuprofen 400 mg as and when required.
Or
Tab. Nimesulide 100 mg twice a day.
Incision and drainage may be necessary in some cases.

Patient education

- In patients having recurrent boils, diabetes mellitus should be ruled out and patients are instructed not to do ear picking.

COMMON COLD (CORYZA)

This is one of the most common acute viral infection affecting upper respiratory tract.

SALIENT FEATURES

- Rhinorrhoea, nasal obstruction, malaise and fever.

Treatment

Nonpharmacological

Steam inhalation via nose 2-3 times/day for 2-3 days; rest; home remedies (ginger, tulsi, honey).

Pharmacological

1. Tab. Chlorpheniramine maleate 4 mg 8 hourly for 5-7 days.
In children: 0.35 mg/kg/day divided in 3 equal doses.
Or
Tab. Pheniramine maleate 25 mg 2-3 times daily for 5-7 days.
In children: 0.5 mg/kg/day divided in 3 equal doses.
Or
Tab. Cetirizine dihydrochloride 10 mg once a day for 5-7 days.
In Children: 5 mg once a day.
Or
Tab. Levocetirizine 5 mg once daily
Or
Tab Montelukast 5-10 mg once a day for 3-6 weeks
2. If patient has malaise and fever:
Tab. Paracetamol 500 mg 3-4 times a day for 2-3 days and then as and when required.
In children: 40-60 mg/kg/day divided in 4 doses or 10 mg/kg/dose as and when required.
3. If nasal obstruction or rhinorrhoea is profuse:
Saline nasal drops, 1-2 drops in each nostril 2-3 times daily.
4. If nasal obstruction is severe:
Ephedrine 0.75% nasal drops, 1-2 drops in each nostril 3 times a day for 2-3 days.
In children: 0.5% nasal drops, 1-2 drops in each nostril 2-3 times daily
Or
Oxymetazoline HCl 0.05% nasal drops, 1-2 drops in each nostril 2 times a day for 2-3 days.
In children: 0.025%, 1-2 drops, 2 times daily for 2-3 days.
Or
Xylometazoline 0.1% nasal drops, 1-2 drops in each nostril 2 times a day for 2-3 days.
In children: 0.05%, 1-2 drops, 1-2 times daily.
(**Caution:** Not recommended in children below 6 years of age)
Decongestant nasal drops should NOT be used for more than 7 days.
Symptomatic improvement occurs within 48 hours in the form of decreased rhinorrhoea, nasal obstruction, paroxysmal sneezing, malaise and fever.

Patient education

- This is a self-limiting viral infection and usually subsides in one week requiring only symptomatic relief.
- Antibiotics have no role.
- Chlorpheniramine and pheniramine can cause sedation and cognitive impairment, therefore, patient should avoid tasks requiring alertness and skill.

- Medicated nasal drops used for longer period can cause rebound congestion and rhinitis medicamentosa.

Reference

1. Rhinosinusitis. In: Scott Brown's Otolaryngology. Booth JB (ed) Vol 2, 7th Edition, 2008; pp. 1439-1457.

ALLERGIC RHINITIS

This is an IgE mediated hypersensitivity of the mucous membrane of the nasal passage.

SALIENT FEATURES

- Sneezing, itching, watery nasal discharge and a feeling of nasal obstruction.
- It may be associated with allergic conjunctivitis and bronchial asthma.
- It can be divided into the following types:
 - **Seasonal allergic rhinitis (SAR/hay fever).** Sneezing, itching, watery rhinorrhoea and conjunctivitis are prominent symptoms.
 - **Perennial allergic rhinitis (PAR).** This differs from SAR as this is due to long-standing nasal mucosal congestion. In this condition, nasal discharge is more viscous or purulent. Usual symptoms are nasal blockage, postnasal discharge and hyposmia. Diagnosis can be made, if patient is having two or more symptoms (viz. sneezing/itching, nasal discharge and nasal blockage) occurring for more than one hour on most days.

Treatment

Nonpharmacological

Avoid allergens.

Pharmacological

1. Tab. Cetirizine 10-20 mg in a single daily dose for 7 days
In children: 5 mg in a single daily dose.
Or
Tab. Levocetirizine 5 mg once daily,
Or
Tab. Fexofenadine 120-180 mg daily for 7 days,
Or
Tab. Chlorpheniramine maleate 4 mg 6-8 hourly for 7 days.
In children 1-2 years: 1 mg twice daily; 2-5 years 1 mg every 3-6 hours;
6-12 years 2 mg every 4-6 hours.
(**Caution:** Not recommended for children under 1 year)

- Or
 Tab. Pheniramine maleate 25-50 mg 8 hourly for 7 days.
 In children: 0.5 mg/kg/day divided in 3 doses.
 The duration of treatment may need to be extended depending upon the response of the patient.
2. If nasal obstruction and rhinorrhoea,
 Normal saline nasal drops 1-2 drops in each nostril 2 times daily.
 Or
 Xylometazoline 0.1% nasal drops 1-2 drops 2-3 times daily for 5-7 days.
 In children: 0.05% 1-2 drops 2 times daily.
 Or
 Oxymetazoline 0.5% nasal drops 2-3 drops 2-3 times daily for 5-7 days.
 In children: 0.025% 1-2 drops 2 times in each nostril
3. In case signs and symptoms are persistent:
 Betamethasone nasal drops 2-3 drops 2-3 times a day.
 Or
 Hydrocortisone nasal drops 2-3 drops 2-3 times a day.
 Or
 Beclomethasone inhaler (50 mcg/puff) 2 puffs 12 hourly.
 Or
 Budesonide (50-100 mcg/puff) intranasal spray 1-2 puffs a day.
 Or
 Fluticasone (150 mcg/puff) intranasal spray 1-2 puffs a day.
 Or
 Topical Azelastine intranasal spray 2-3 times a day.
4. In case of no response to the treatment outlined above,
 Tab. Prednisolone 5-60 mg/day in 3-4 divided doses for 5-7 days.
 Or
 Tab. Dexamethasone 0.5-5.0 mg/day in 3-4 divided doses for 5-7 days.
 Or
 Tab. Betamethasone 0.5-5.0 mg/day in 3-4 divided doses for 5-7 days.

Patient education

- It is due to hypersensitivity and there is no cure but symptoms can be controlled effectively by the judicious use of drugs and the patient can lead a normal life.
- Medicated nasal drops should not be used for more than seven days. Prolonged use of topical decongestant nasal drops to be avoided as it can cause rebound phenomenon—atrophy rhinitis, anosmia and rhinitis medicamentosa.
- Chlorpheniramine, pheniramine, etc. can cause sedation, cognitive impairment. Patient should avoid tasks requiring alertness and skill. These drugs can also cause dryness of the mouth and urinary hesitancy.
- Systemic steroids should not be stopped abruptly. Dose to be tapered off before cessation of therapy.

References

1. Allergic Rhinitis. In: Scott Brown's Otolaryngology. Booth JB (ed) Vol 2, 7th Edition, 2008; pp. 1386-1407.
2. Allergic Rhinitis. In: Cuning's Otolaryngology, Vol.2, 4th Edition 2/42/981-989.

FURUNCULOSIS OF NOSE (VESTIBULITIS)

Furunculosis is an acute infection of hair follicle with *Staphylococcus aureus*.

SALIENT FEATURES

- Severe pain and tenderness over the tip of nose.
- There may be headache, malaise and pyrexia.
- Examination reveals congestion and swelling of the vestibule.

Treatment***Nonpharmacological***

Local application of moist heat will enhance the localization of infection and promote drainage.

Pharmacological

1. Cap. Amoxicillin 500 mg 8 hourly for 5-7 days.
In children: 25-50 mg/kg/day in 3 divided doses.
Or
Cap. Amoxicillin 250 mg + Cloxacillin 250 mg 8 hourly for 5-7 days.
In children: 25-50 mg/kg/day in 3 divided doses.
Or
Cap. Amoxicillin 250/500 mg + Clavulanic acid 125 mg 12 hourly for 5-7 days.
2. Tab. Ibuprofen 400-600 mg 3 times a day for 5 days.
In children: 10 mg/kg/dose.
Or
Tab. Paracetamol 500 mg 6 hourly for 2-3 days then as and when required till pain and fever subsides.
In children: 10 mg/kg 6-8 hourly
Usually improvement in pain, tenderness and inflammation occurs within 24-48 hours after initiation of treatment. Patient should be monitored regularly. If there is flaring of infection in the form of spreading facial cellulitis, then patient should be hospitalized and shifted to systemic intravenous antibiotics. If patient is having recurrent furunculosis, then the patient should be investigated for diabetes mellitus.

Patient education

- Do not fidget with the furuncle as this lies in the dangerous area of the face and can cause serious complications like cavernous sinus thrombophlebitis.
- Complete antibiotic therapy to avoid risk of developing antimicrobial resistance.

Reference

1. Conditions of the External Nose. In: Scott Brown's Otolaryngology. Booth JB (ed) Vol 2, 7th Edition, 2008; pp. 1699-1717.

EPISTAXIS

The most important causes of epistaxis include trauma in the form of nose-picking; hypertension, bleeding disorders, nasal mass and acute inflammation.

SALIENT FEATURES

- Bleeding from the nose and mouth.
- Shock due to excessive loss of blood.

Treatment

The treatment instituted will depend on a number of factors such as:

- Type and severity of bleeding.
- Condition of the patient.
- Identification of a local or systemic cause for the bleeding.

In cases with active epistaxis, check the vitals and pinch the nose (apply firm pressure below the nasal bone) then wait for 15 minutes and again check nose for bleeding. If bleeding does not stop, refer to an otolaryngologist for nasal cautery. Patient should be admitted in the hospital for nasal cautery.

If nasal cautery is not able to stop bleeding, do nasal packing (anterior, posterior, merocel), start antibiotics and remove the pack after 48 hours. If bleeding not controlled, arterial ligation, angiography and embolization may be required.

Simultaneously, treat the underlying cause.

Recurrent epistaxis

Identify the cause and treat accordingly.

Patient education

- Patients must be advised against nose picking, especially in children.
- As first aid, explain how to pinch the nose tightly and apply ice pack over the nose, while waiting for proper medical attention.

References

1. Epistaxis. In: Scott Brown's Otolaryngology. Booth JB (ed) Vol 2, 7th Edition, 2008; 1596-1607.
2. Epistaxis. In: Cummings Otolaryngology, Vol. 2, 4th Edition 2/40/942-96.

ACUTE RHINOSINUSITIS

This condition often occurs due to secondary bacterial infection after viral rhinitis.

SALIENT FEATURES

- Headache, facial pain, nasal obstruction, hawking and postnasal drip.
- Examination shows congested nasal mucosa, pus in the middle meatus and tenderness over sinuses.

Treatment***Nonpharmacological***

Steam inhalation via nose 2-3 times/day for 2-3 days; rest.

Pharmacological

1. Tab. Paracetamol 500 mg 3-4 times a day for 5 days.
In children: 10 mg/kg/dose.
Or
Tab. Ibuprofen 400-600 mg 3 times a day for 5 days.
In children: 10 mg/kg/dose.
2. Cap. Amoxicillin 500 mg 8 hourly for 5-7 days.
In children: 50 mg/kg/day in 3 divided doses.
Or
Tab. Ciprofloxacin 250-500 mg twice a day for 5-7 days.
(**Caution:** Not recommended in children)

In sinusitis of dental origin

1. Cap. Amoxicillin 500 mg 3 times a day for 5-7 days.
Or
Cap. Amoxicillin 250/500 mg + Clavulanic acid 125 mg 12 hourly for 5- 7 days.
2. Tab. Metronidazole 400 mg 3 times a day for 5-7 days.
Or
1. Tab. Ciprofloxacin 500 mg 2 times a day for 5-7 days.
2. Tab. Tinidazole 600 mg 2 times a day for 5-7 days.
3. Tab. Bromhexine 8 mg 3 times a day for 7 days.

4. If nasal obstruction or rhinorrhoea,

Normal saline nasal 1-2 drops in each nostril 2-3 times a day.

Or

Ephedrine 0.75% nasal drops in isotonic saline 1-2 drops in each nostril 2 times a day.

In children: 0.5% 1-2 drops in each nostril 2 times daily.

Or

Oxymetazoline HCl 0.05% nasal drops. 1-2 drops in each nostril 2 times a day.

In children: 0.025% 1-2 drops in each nostril 2 times daily.

Or

Xylometazoline 0.1% nasal drops 2-3 drops in each nostril 2-3 times a day.

In children: 0.05% 1-2 drops in each nostril 2 times daily.

(Caution: Medicated nasal drops should not be used for more than 7 days).

Improvement is seen in symptoms, viz. pain tenderness, nasal obstruction and discharge within 48-72 hours after initiation of therapy. If there is no desirable response, patient should be referred to an otolaryngologist.

Patient education

- To take full course of systemic antibiotics to avoid the risk of developing antimicrobial resistance.
- Prolonged use of topical decongestants more than a week to be avoided as it can cause atrophic rhinitis, anosmia and rhinitis medicamentosa.

References

1. Rhinosinusitis. In: Scott Brown's Otolaryngology. Booth JB (ed) Vol 2, 7th Edition, 2008; pp. 1439-1457.
2. Ferguson BJ. Infectious causes of rhinosinusitis. In: Cunning's Otolaryngology, Vol. 2, 4th Edition, 2/50/1182-96.

ACUTE TONSILLITIS

It is the acute inflammation of the palatine tonsils, generally bacterial in aetiology.

SALIENT FEATURES

- Pain in the throat aggravated on swallowing and congestion of the tonsils and the anterior pillars.
- Fever and malaise.
- Enlarged and tender jugulodigastric lymph nodes.

Treatment

Nonpharmacological

Plenty of oral fluids and rest and warm saline gargles.

Pharmacological

1. Cap. Amoxicillin 500 mg 3 times a day.
In children: 50 mg/kg/day in 3 divided doses for 7 days.
Or
Cap. Erythromycin 500 mg three times a day.
In children: 50 mg/kg/day in three divided doses for 7 days.
Or
Cap. Amoxicillin 250/500 mg + Clavulanic acid 125 mg 12 hourly for 5- 7 days.
2. Tab. Paracetamol 8-10 mg/kg 6-8 hourly and then as and when required, till fever subsides.
Or
Tab. Nimesulide 1.5-2 mg/kg/day and then as and when required, till fever subsides in adults.

Patient education

- In case of development of any complication such as peritonsillar abscess or peritonsillitis, the patient should be admitted for intravenous antibiotic treatment and/or surgical drainage, if required, under the supervision of an ENT surgeon.
- In case of recurrent episodes of acute tonsillitis, more than 4-5 annually, the patient must be referred for surgery.

References

1. Diseases of the Tonsil. In: Scott Brown's Otolaryngology. Booth JB (ed) Vol. 1, 7th Edition, 2008; pp. 1219-1228.
2. Wiatrak BJ. Pharyngitis and adenotonsillar disease. In: Cunning's Otolaryngology, Vol. 4, 4th Edition, 4/181/4138-43.

ACUTE PAROTITIS

It is an acute bacterial infection of the parotid gland.

SALIENT FEATURES

- Swelling at the angle of mandible pushing ear lobule laterally, generally unilateral, induration and tenderness of gland. Purulent saliva may be expressed from the duct opposite the upper second molar.

Treatment**Nonpharmacological**

Adequate hydration, good oral hygiene, repeated massage of the gland.

Pharmacological

1. Cap. Cloxacillin 20-40 mg/kg in 3 divided doses for 7 days.
Or
Tab. Ciprofloxacin 500 mg twice daily for 7 days in adults.
2. Tab. Paracetamol 8-10 mg/kg thrice daily for 3 days and then as and when required, if pain and fever persists.
Or
Tab. Nimesulide 1.5-2 mg/kg twice daily for 3 days in adults and then as and when required, if pain and fever persists.
3. Antiseptic mouthwash containing (Povidone Iodine 1% or Chloroxylenol 1.02%, Menthol 0.12%, Absolute Alcohol 60.8%) to be used 3 times a day.
In case parotitis is not responding, and there is increasing swelling over the parotid region or development of induration over the gland, it may require incision and drainage. This should be done by an otolaryngologist in a direction parallel to the direction of the facial nerve.

Patient education

- To maintain good oral hygiene.

References

1. Salivary Gland Disorders in Childhood. In: Scott Brown's Otolaryngology. Booth JB. Vol 3, (ed) 7th Edition, 2008; pp. 1242-1250.
2. Inflammatory disorders of the salivary glands. In: Cumming's Otolaryngology, Vol. 2, 4th Edition, 2/58/1323-28.

FACIAL PARALYSIS

The VII cranial nerve is frequently affected in diseases of the ear. The central causes (upper motor neuron type) are brainstem infarction, tumours and multiple sclerosis. The peripheral causes are inflammatory (ASOM, CSOM or herpes zoster oticus), traumatic (accidental or iatrogenic), neoplastic or idiopathic (as in Bell's palsy or Melkersson's syndrome) and due to systemic diseases such as diabetes mellitus, sarcoidosis and demyelinating diseases, etc. The paralysis is of the lower motor neuron type, i.e. it affects the entire face on the ipsilateral side.

Treatment**Nonpharmacological**

Treat the underlying cause of the lesion. Surgical intervention is often indicated in peripheral causes like ASOM, CSOM and tumours.

Pharmacological (idiopathic paralysis of the facial nerve—Bell's palsy)

Tab. Prednisolone 1-2 mg/kg/day in single or two divided doses for 1 week (maximum: 60 mg/day). Review after one week.

If clinical improvement is present, taper steroids over 4-5 days. If no clinical improvement, continue for another week before tapering the dose. If recovery does not occur, surgical intervention may be required.

Patient education

- Wear an eye pad over the affected eye or use lubricant eyedrops to avoid exposure keratitis.
- Facial exercises to be done.

References

1. Disorders of the Facial Nerve. In: Scott Brown's Otolaryngology. Booth JB (ed) Vol 3, 7th Edition, 2008; pp. 3870-3894.
2. Gantz BJ. Intratemporal facial nerve surgery. Vol. 3, 4th Edition, 3/148/3354-70.