Common ENT Complaints (EAR)
For CHO/SN

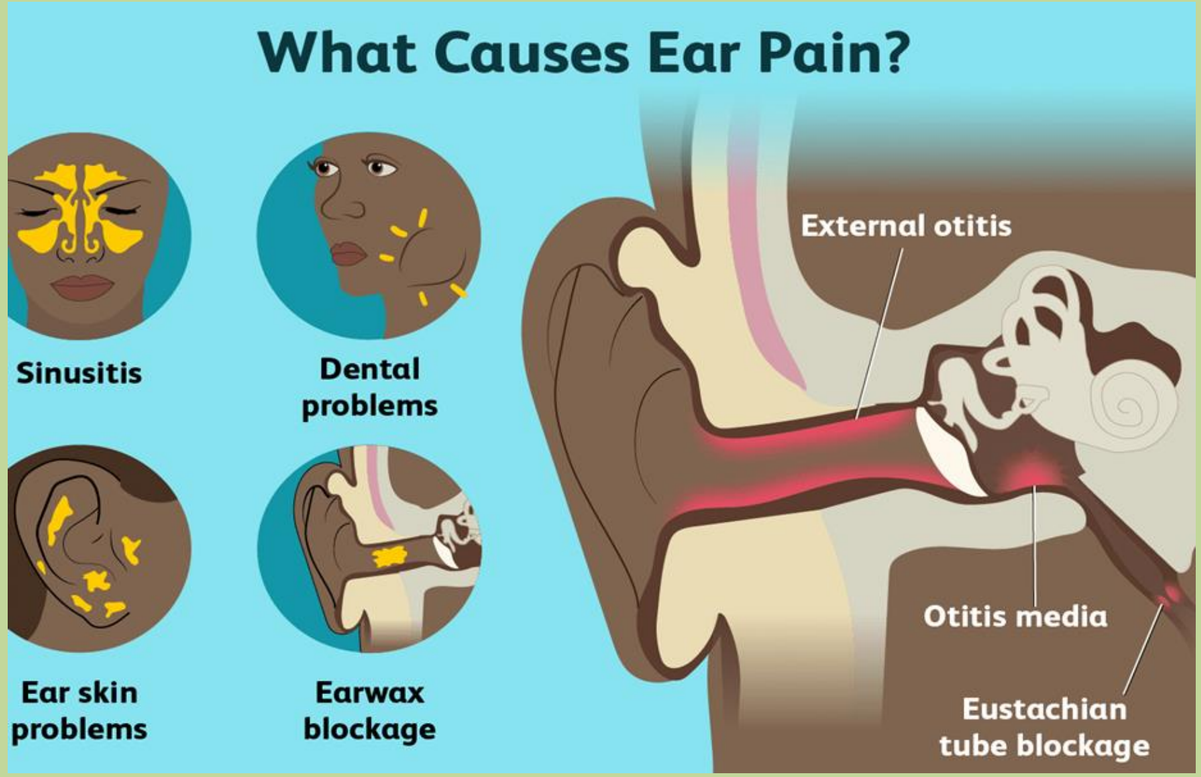
LEARNING OBJECTIVES

- To identify the common ear complaints in the community
- To explain the risk factors and causes of the common ear ailments
- To elaborate on the approaches to manage the patients at the HWC
- To identify the indications for referral

EARACHE (OTALGIA)

Pain in the Ear

- Causes
- Primary (most common)
  - External otitis
  - Otitis media
  - Mastoiditis
  - Impacted wax



- Secondary (referred)
  - CN- 5,7,9,10
  - Problem in the teeth, jaw, trigeminal neuralgia, intracranial lesions

MANAGEMENT AT SHC-HWC

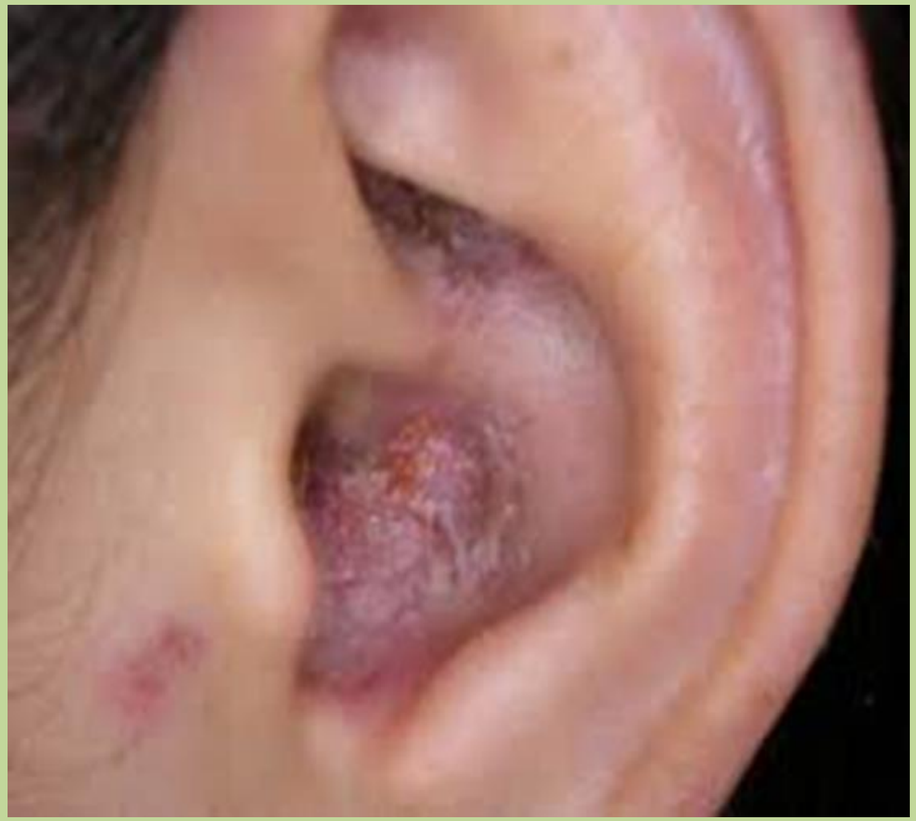
- Ear, oral, throat- examination and find the underlying cause
- Signs and symptoms of infection/ trauma around the ear
- Secretions in the ear canal mop with a sterile gauze piece
- Ciprofloxacin ear drops- 2 drops, 2-3 times/ day, only when no discharge is coming.
- In case of active discharge- chances of perforation- keep the ear dry
- Paracetamol 25-30mg/kg/day TDS
- F/U after 5 days

INDICATIONS FOR REFERRAL

- Severe pain even after painkiller intake
- Chronic pain (>2 weeks), especially with other head/ neck symptoms
- Swelling/other signs of inflammation at the external auditory canal
- High-grade fever/ toxic
- Earache following trauma
- No apparent reason even after thorough history taking and examination

OTITIS EXTERNA (EXTERNAL EAR INFECTION)

- Inflammatory process of the external ear
- Infection (bacterial, fungal)
- Non- infectious systemic &
- Local dermatological processes



RISK FACTORS

- Dark, warm and moist ear canal- excellent environment to bacterial and fungal growth
- Trauma
- Curve canal- objects struck inside
- Presence of hairà infected boils

CLINICAL FEATURES

- Severe pain in the ear or movement of the pinna
- Painful ear on jaw movements
- Swelling of lymph nodes around the neck
- Diffuse inflammation of the ear canal with crusts and discharge from the ear

MANAGEMENT AT SHC-HWC

- Dry mopping with cotton wick
- Ear pack of 10% ichthammol glycerine
- Cap. Amoxycillin-5days in age-appropriate dosage
- Tab. PCM 500mg BD daily for 5 days

RESPONSIBILITIES OF CHO IN MANAGING EXTERNAL EAR INFECTION

- Diagnosis all cases for ear pain and confirm infection of the outer ear canal
- Clean ear with dry cotton wick
- Give symptomatic treatment for pain
- Consult with MO-PHC or ENT specialist to confirm the diagnosis and initiating treatment
- F/U of all cases- to ensure completion of antibiotic treatment.

- If no improvement after 1 week, refer back to ENT specialist

- Maintain updated records

- Advise the community regarding personal hygiene and how to clean the ear regularly

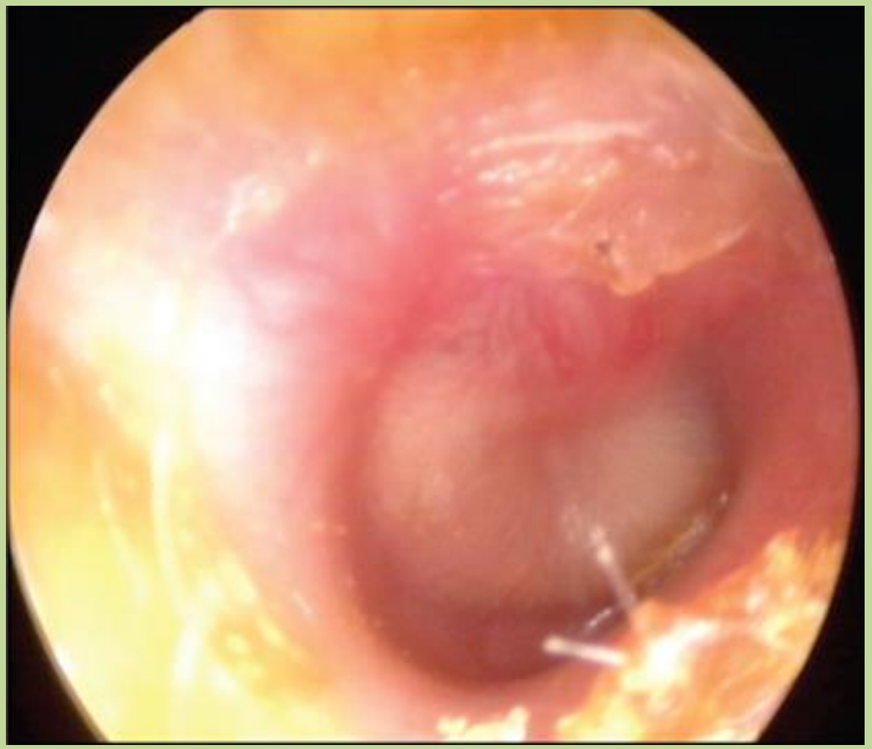
- Advise to avoid putting sharp objects in the ear. Clean and dry the ear after swimming

OTITIS MEDIA
(MIDDLE EAR INFECTION)

- Inflammatory condition of the middle ear space
- Commonly presents in infants and children
- Poor hygiene
- Two types:

  1) Acute Suppurative Otitis Media
     - Acute bacterial infection of the middle ear

  2) Chronic Suppurative Otitis Media
     - Result of long-standing infection



RISK FACTORS

- Recurrent attacks of common cold and upper respiratory tract infections
- Diseases like measles, diphtheria, whooping cough
- Infections of tonsils
- Chronic rhinitis and sinusitis
- Nasal allergy
- Cleft palate (congenital disorder)

SYMPTOMS

- Ear ache – which even disturbs sleep
- Reduced hearing
- Very high fever
- If the eardrum is perforated: Bleeding/pus ear discharge
- Tinnitus in some cases
- Additional symptoms in children:
  - Vomiting, loose motion
  - Sleeplessness, incessant cry, irritability

SIGNS

- Signs of Upper Respiratory Tract Infection

- Tenderness can be present over the mastoid region (the bony part behind the ear lobe)

- External auditory canal may contain blood-tinged discharge which may also have pus

SEROUS OTITIS MEDIA

- Watery discharge from the middle ear
- Commonly seen in school going children
- Mostly viral infection and seasonal allergy
- Hearing loss, mild earaches but less severe symptoms than Suppurative Otitis Media
- Nasal decongestants and antiallergic medicines
- No antibiotics

MANAGEMENT AT SHC-HWC

- Counsel and keep the ear dry
- In case of discharge – dry mopping of the ear
- No putting any ear drops or oil into the ear
- Tab. Paracetamol (500 mg) three times a day OR Syrup Paracetamol 10-15mg/kg body weight in 3 divided doses (Paediatric)
- Antibiotics like Amoxicillin or Azithromycin for 5-7 days
- Nose drops (1% in adults and 0.5% in children or Xylometazoline or oxymetazoline can be used 2-3 drops thrice a day) to reduce nasal blockage
- Dry local heat

WHEN TO REFER TO A SPECIALIST

- No improvement /symptoms worsen even after 48 hours of medical treatment
- Features like vomiting with headache, facial palsy, dizziness, mastoid tenderness
- Any other condition also present such as tonsillitis, rhinosinusitis
- Foul-smelling discharge

RESPONSIBILITIES OF CHOS IN MANAGING MIDDLE EAR INFECTIONS

- Diagnose all cases and confirm infection of the middle ear
- Clean ear with a dry cotton wick and symptomatic treatment for pain
- Consult with the MO-PHC or ENT specialist to confirm diagnosis and initiating treatment
- Follow up on all cases to ensure completion of antibiotic treatment
- No improvement after 1-week refer to ENT specialist
- Ensure that all children in your area are fully immunized

RESPONSIBILITIES OF CHOS IN MANAGING MIDDLE EAR INFECTIONS

- Maintain updated records
- Advise the community about maintaining personal hygiene and how to clean the ear regularly
- Advise to avoid putting sharp objects in the ear
- Clean and dry the ear after swimming

VERTIGO

- Subjective feeling of movement- self or objects
- Inner ear- carry sound and maintain balance
- Clinical features:
  - Dizziness and feeling of rotation or spinning
  - Light headedness, faintness, weakness
  - Blurring of vision, syncope or ‘blacking out’ and imbalance/ unsteadiness
  - Detailed general and systemic examination (especially CVS and CNS examination) may show abnormalities
  - BP and RBS may be raised
  - Tuning fork tests - reduced hearing

CAUSES

- Ear related causes- Meniere's disease, Benign paroxysmal positional vertigo (BPPV), labyrinthitis, vestibule-toxic drugs, otosclerosis

- Neurological causes- Multiple sclerosis, transient ischemic attacks, intracranial tumors, seizures, etc

- Systemic causes- Hypotension, certain viral infections, hypothyroidism, DM, head injury

- Certain drugs- anticonvulsants (phenytoin, pregabalin, gabapentin), anti-hypertensive (propranolol, furosemide), anti-depressants (fluoxetine), analgesics (codeine), alcohol

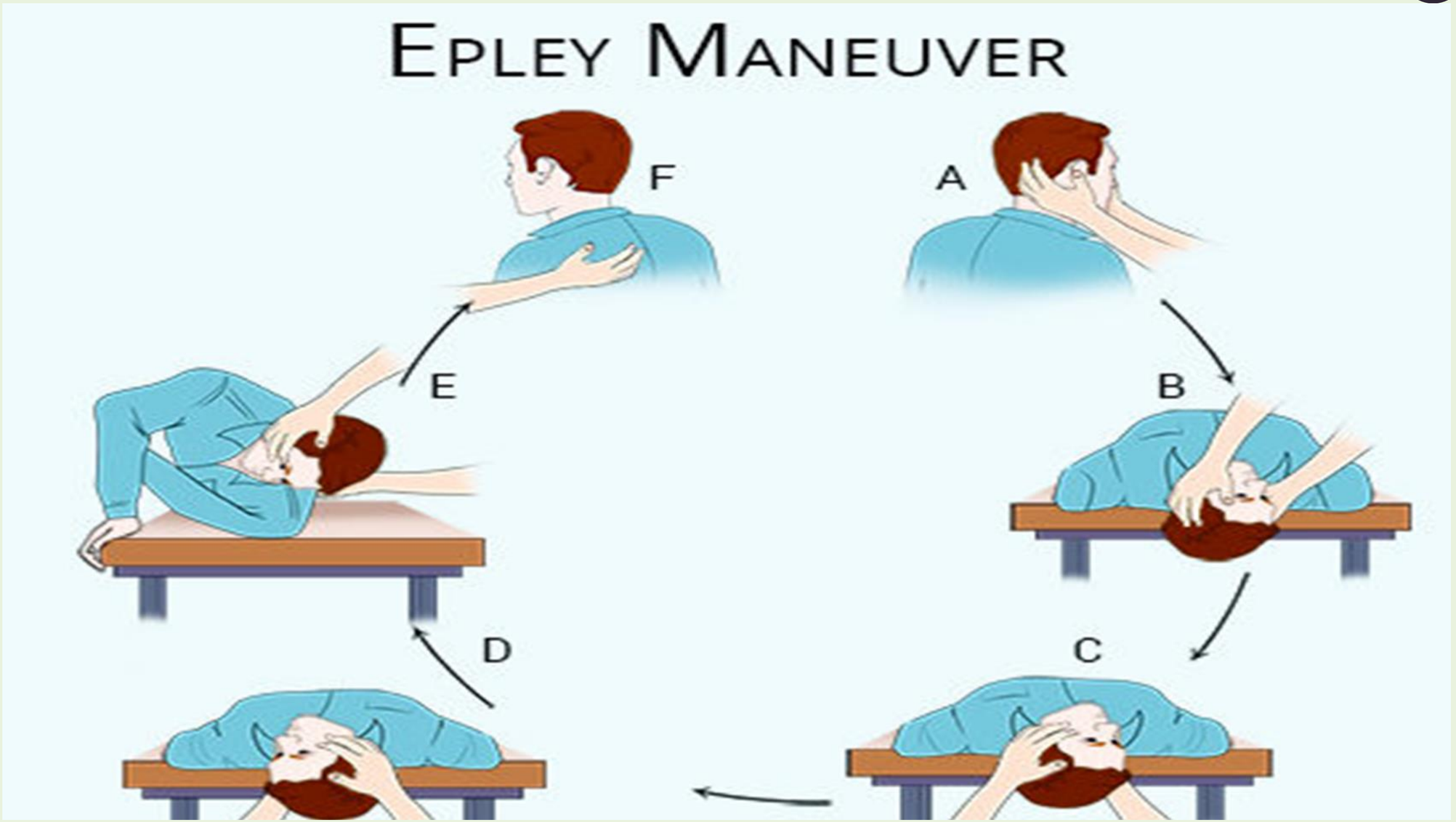
ROMBERG'S TEST

- The patient stands with their feet together (touching each other) and close their eyes
- Remain close to the patient
- Interpretation:
  - Not swaying :Normal
  - Sways after the closure of eyes: Romberg Positive.
  - Diseases in the vestibular system or sensory nervous system
  - Sways even with eyes open: Disease in the cerebellar functions

MANAGEMENT AT SHC-HWC

- Reassurance and avoiding the posture that triggers the symptoms
- Prochlorperazine 5mg BD or Cinnarizine 25 mg BD or Betahistine 16 mg BD for 5 days
- Multi-Vitamins
- Counsel:
    - Reduced intake of caffeine/ alcohol
    - Avoiding performing tasks that may cause harm
    - Keep a note of the medicines being consumed and emergency contact numbers

EXERCISE



WHEN TO REFER TO A SPECIALIST?

- No improvement after 2 days of starting treatment
- Sudden fainting
- History of injury to the head or ear
- Known case of Epilepsy
- Known case of any inner ear problems, tumors

RESPONSIBILITIES OF CHO IN MANAGING VERTIGO

- Consult with MO-PHC and referral to ENT specialist for confirming the diagnosis and initiating treatment
- Follow up on all cases to ensure that they complete the prescribed treatment.
- No improvement after 1 week refer back to ENT specialist
- Maintain updated records
- Support for lifestyle modification or exercise

HEARING LOSS
OR REDUCED HEARING

- Affect any age

- Causes- injury leading to rupture of the eardrum, a severe infection of the ear, tumor in the ear, sudden exposure to very loud sounds (like explosions) or prolonged exposure to loud sounds (like people working in factories with noise from heavy machinery)

- Congenital deafness when the mother is exposed to certain infections, medicines, or radiation during pregnancy.

- Age-related hearing loss (presbycusis) usually after 65 years of age

TYPES

- Conductive hearing loss – problems in the ear canal, eardrum or middle ear, blockage due to ear wax, punctured eardrum, damage to bones of the middle ear

- Sensorineural hearing loss- damage to the cochlea or auditory nerve

- Mixed type of hearing loss

MANAGEMENT AT SHC-HWC

- Identification by ASHA/MPW
- History taking
  - Onset- suddenly or gradually
  - Stationary or progressive
  - Family history
  - Other ear symptoms
  - Tests done earlier or treatment done
- Confirm the presence of hearing loss and refer
- Disability certificate and entitlements

Check:

1. Any obstruction in the ear canal – foreign body, wax

2. Any ear discharge or recent history of injury to the ear

3. Speech is affected also or not

4. Hearing is lost for low-frequency sounds or high-frequency sounds

5. Intake of certain drugs

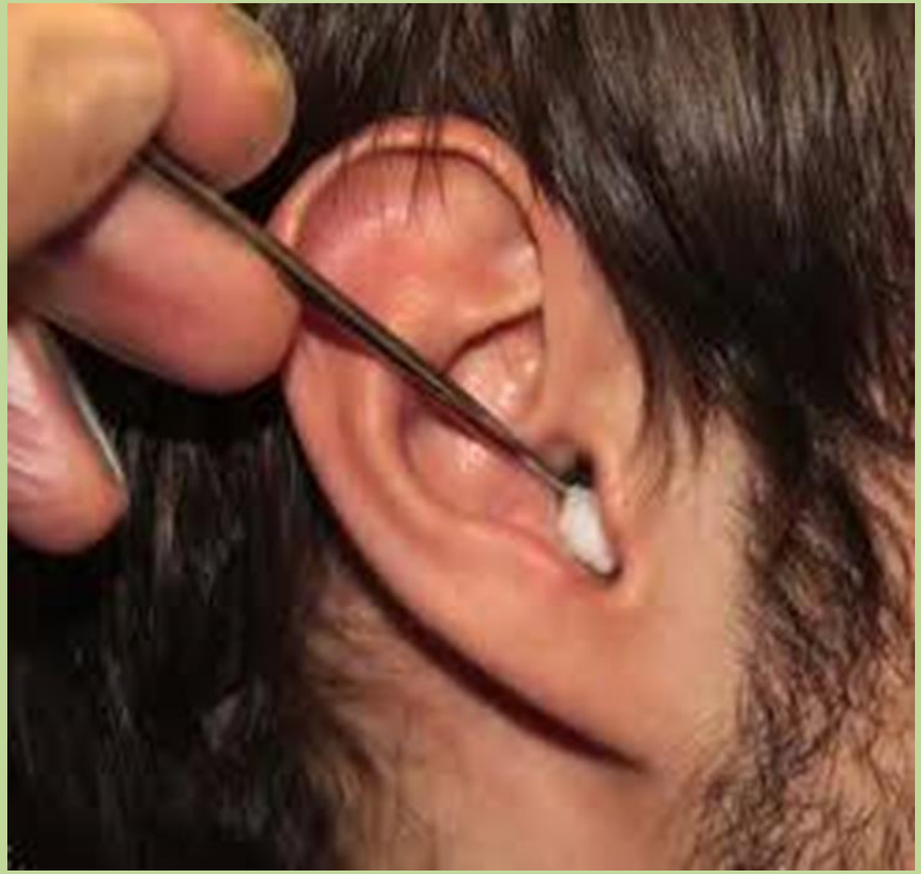
6. Exposure to very loud sounds – explosion, gunfire

RESPONSIBILITIES OF CHO

- Supervision of ASHA/MPW in screening
- Assist RBSK teams to screen children 0-18 years of age for hearing loss through Anganwadi centers, schools, etc.
- Identify hearing loss and refer to an ENT specialist
- Follow up and support individuals
- Arrange for assistive devices (hearing aids, etc.)
- Maintain updated records
- Inform people with deafness about financial schemes and benefits for their uptake, if found to be eligible.

FOREIGN BODY IN EAR

- Living: e.g. Insect, Flies, Maggots
- Non-living:
  - Hygroscopic- Vegetables, Beans, seeds
  - Non-hygroscopic- Beads, stones, pebbles, Rubber, metallic objects



CLINICAL FEATURES

- History of foreign body entering the ear
- Ear Pain
- Tinnitus
- Discomfort and complaints of nausea or vomiting if a live insect is in the ear canal
- Bleeding may occur in case of sharp objects
- Hearing loss
- Erythema and swelling of the canal and foul-smelling discharge

MANAGEMENT AT SHC-HWC

Type of foreign body	What to use to remove
Soft and irregular- paper, swab or sponge	Fine alligator forceps
Smooth objects- seed grains, metallic objects	Syringing
Insect	Kill the insect with mineral oil or lidocaine Remove with forceps
Sharp object	Refer

WHEN TO REFER TO AN ENT SPECIALIST?

- A small child who cannot stay in one position
- Sharp objects
- Objects in the ear canal
- Tightly impacted objects
- Any kind of discharge
- Previous unsuccessful attempts at removal

RESPONSIBILITIES OF CHO

- First, find out the type and location
- Try to remove
- Person restless, do not try to remove the object- refer
- Ensure there is no other injury to the head or neighboring area
- Follow up on all cases that are referred
- Advise the community about keeping children safe and away from small seeds, stones, etc that can go into their ear
- Keep records and registers updated

EVALUATION

State True or False

1. Treatment for Serous otitis media- Nasal decongestants, antiallergic medicines and antibiotics in consultation with the PHC-MO.
2. In case of Otalgia, Ciprofloxacin ear drops- 2 drops, 2-3 times/ day can be given even when discharge is coming.
3. Epley's manoeuvre is conducted for removing of foreign body from the ear.
4. Insects can be removed by instillation of mineral oil or lidocaine and removal with forceps.

ANSWERS

1. Treatment for Serous otitis media- Nasal decongestants, antiallergic medicines, and antibiotics in consultation with the PHC-MO. **(False)**
2. In the case of Otalgia, Ciprofloxacin ear drops- 2 drops, 2-3 times/ day cannot be given when discharge is coming. **(True)**
3. Epley's manoeuvre is conducted for removing of foreign body from the ear. **(False)**
4. Insects can be removed by instillation of mineral oil or lidocaine and removal with forceps. **(True)**

Thank You