Ears, Nose and Throat

• Objectives
  – Define, understand and correctly pronounce medical terms related to the ears, nose and throat
  – Describe the following related to the ears, nose, throat
    • common diseases and conditions
    • laboratory and diagnostic procedures
    • medical and surgical procedures
    • medications

Anatomy of the Ear

• Outer ear
  – Referred to as the auricle or pinna
• Middle ear
  – Auditory ossicles
    • Malleus
    • Incus
    • Stapes
  – Tympanic membrane
Hearing Loss and Deafness

Reasons for Hearing Loss

- Heredity
- Ear infections
- Meningitis
- Trauma
- Certain medicines
- Long-term exposure to loud noises
- Aging

Possible Treatments

- Hearing aid
- Cochlear implants
- Special training
- Certain medicines
- Surgery

Anatomy of the Ear

- Inner Ear
  - Location
    - Large cavity in the temporal bone
  - Sensory organs
    - Cochlea
      - Three fluid-filled canals
    - Organ of Corti

Ear Disorders and Diseases

- Acoustic Neuroma
  - Noncancerous nerve tumor
  - Symptoms
    - One-sided hearing loss
    - Ringing in ears
    - Dizziness
    - Balance problems
  - Diagnostic tests
    - Ear exams
    - Hearing tests
    - Scans
  - Treatment
    - Surgery
    - Radiation
Ear Disorders and Diseases

- Dizziness and Vertigo
  - Light-headed, loss of balance=dizziness
  - Surroundings seem to whirl around=vertigo

- Ear Infections
  - Otitis media
  - Common in young children
  - Symptoms
    - Pain, ear drainage, hearing problems
  - Treatment
    - Medications
    - Ear tubes

- Meniere’s Disease
  - Symptoms
    - Tinnitus (roaring in ears)
    - Hearing comes and goes
    - Ear pressure or pain
  - Treatment
    - Changing diet
    - Medications
    - Surgery

- Noise
  - Hazardous
    - Sound levels >80 decibels
Ear Disorders and Diseases

• Meniere’s Disease
  – Symptoms
  – Etiology (or cause)
  – Treatment
• Noise
• Tinnitus
  – Symptoms
    • Roaring in ears
    • May be symptom of other health problems
  – Treatment
    • Hearing aids, sound masking devices, medications

Nose and Throat Overview

• Nose
  – External opening to the respiratory tract
  – Acts as a filter and humidifier for the air breathed
  – Functions as the organ for the sense of smell
• Throat
  – Pharynx
    • Commonly called the throat
    • Connects the mouth and nose to the larynx
  – Larynx
    • Commonly called the voice box
    • Connects the pharynx with the trachea
  – Trachea
    • Commonly called the windpipe
    • Pathway for air to reach the chest

Nasal Cavity Disorders

• Allergy
  – Reaction of immune system
  – Etiology
    • Genetic and environmental
  – Symptoms
    • Runny nose
    • Sneezing
    • Itching
    • Rashes
    • Swelling
    • Asthma
Nasal Cavity Disorders

• Allergy
  – Definition
  – Etiology
  – Symptoms
• Common Cold
  – Most common illness
  – No cure
• Hay Fever
  – Seasonal allergy
  – Treatment
    • Allergy medications
    • Nasal sprays

Nasal Cavity Disorders

• Deviated Septum
• Nasal Polyps
• Nosebleeds
• Rhinitis
• Sinusitis
  – Sinuses infected or inflamed
  – Symptoms
  – Treatment

Nasal Cavity Disorders

• Nasal Cancer
  – Nasal cavity or paranasal sinuses
  – Risk Factors
    • Gender and Age
  – Symptoms
  – Treatment
    • Surgery
    • Radiation
    • Chemotherapy
Throat Disorders

- Cough
  - Acute
  - Chronic

- Diphtheria
  - Bacterial infection of nose and throat
  - Symptoms
    - Bad sore throat
    - Swollen glands
    - Fever and chills

- Streptococcal Infections
  - Group A and B
  - Antibiotics used for both
Streptococcal Infections

- **Group A**
  - Strep throat – a sore, red throat, sometimes with white spots on the tonsils
  - Scarlet fever – red rash on the body
  - Impetigo – a skin infection
  - Toxic shock syndrome – a rare disease caused by certain toxins produced by certain strains of this Staph aureus
  - Cellulitis

- **Group B**
  - Causes blood infections, pneumonia and meningitis in newborns
  - Screening exam during pregnancy
  - Causes infections in urinary tract, blood and skin; also pneumonia in adults

Head and Neck Cancers

- **Location of Cancers**
  - Mouth
  - Nose
  - Sinuses
  - Salivary glands
  - Throat
  - Lymph nodes in the neck
### Ears Combining Forms

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<tr>
<th>Word Part</th>
<th>Meaning</th>
<th>Key Term</th>
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### Unit 8

Tell me, Detective . . . .

- A six month old male baby is brought to the pediatric clinic. The mother states the baby has been crying nonstop, not sleeping, has a fever, and is pulling at his ears. If the physician notes a bulging membrane in the exam of the right ear, what would be a likely diagnosis?

For additional information on content covered in this unit, please visit: