RAMA UNIVERSITY

www.ramauniversity.ac.in

FACULTY OF NURSING

ENT DISORDERS & MANAGEMENT

Prepared by- Miss Astha Verma
RNRM, Nursing Tutor
RAMA university

1- Ear

Anatomy and physiology of the ear

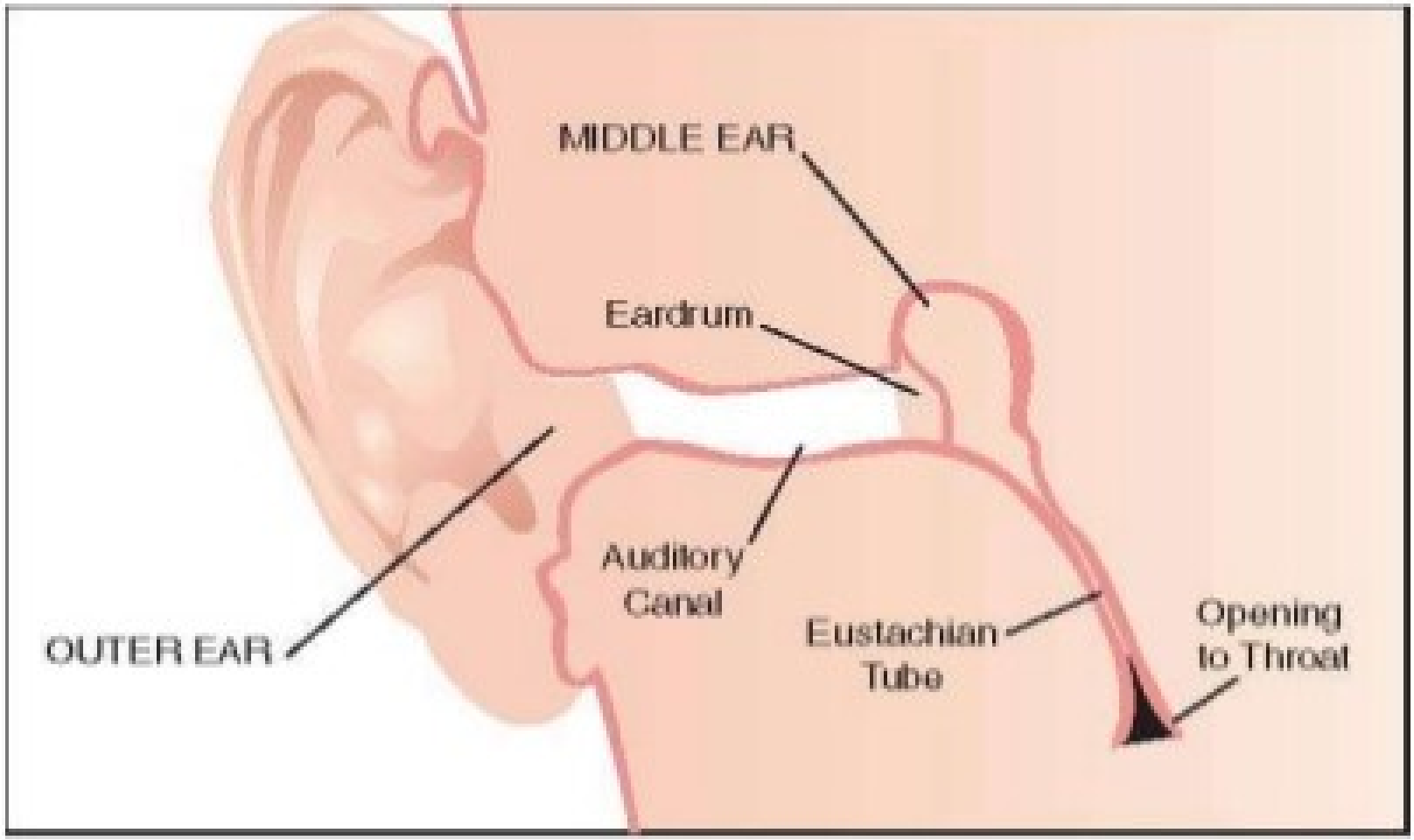


Figure 15-2. The eustachian tube allows air pressure to equalize in the middle ear.

Assessment of the ear

History

The following issues should be included:

Classic symptoms of ear disease: deafness, tinnitus, discharge (otorrhea), pain (otalgia) and vertigo.

Previous ear surgery, or head injury.

Family history of deafness.

Systemic disease (eg, stroke, multiple sclerosis, cardiovascular disease).

Ototoxic drugs (antibiotics (eg, gentamicin), diuretics, cytotoxics).

Exposure to noise (eg, pneumatic drill or shooting).

History of atopy and allergy in children.

Physical assessment of the ear

Inspecting the external ear

Inspect the external ear before examination with an otoscope/auriscope. Swab any discharge and remove any wax. Look for obvious signs of abnormality.

Size and shape of the pinna.

Extra cartilage tags/pre-auricular sinuses or pits.

Signs of trauma to the pinna.

Suspicious skin lesions on the pinna, including neoplasia.

Skin conditions of the pinna and external canal.

Infection/inflammation of the external ear canal, with discharge.

Signs/scars of previous surgery.

Ears disorders

- Otitis media/acute
- Otitis media/chronic
- mastoiditis
- Otosclerosis
- Meniere's disease

Otitis Media

Defined by presence of fluid in the middle ear accompanied by signs and symptoms of the illness.

Peak incidence occurs in the first 3 yrs of life.

The disease is less common in the school aged child,adolescent and adult.

types of Otitis Media are two acute and chronic

Acute Otitis Media

Acute otitis media is an acute infection of the middle ear, usually lasting less than 6 weeks.

The primary cause is the entrance of pathogenic bacteria into the normally sterile middle ear when there is Eustachian tube dysfunction due to obstruction caused by upper respiratory infections, inflammation of the surrounding structures (sinusitis) or allergic reactions(allergenic rhinitis) .

Causative organisms are streptococcus pneumoniae, Hemophilus influenzae, and Moraxella catarrhalis.

Models of entry of the bacteria are the eustachian tube from contaminated secretions in the nasopharynx, and the middle ear from a tympanic membrane perforation.

The disorder is the most common in children.

Clinical Manifestations

Symptoms vary with the severity of the infection and may be either mild and transient or severe; usually unilateral in adults.

Pain in and about the ear (otalgia) may be intense and relieved only after spontaneous perforation of the eardrum or after spontaneous perforation of the eardrum or after myringotomy.

Fever, drainage from the ear

Tympanic membrane is erythematous and often bulging or perforated

Conductive hearing loss due to exudate in the middle ear

Even if the condition becomes subacute (3weeks to 3months) with purulent discharge, permanent hearing loss is rare.

Complications

Perforation of tympanic membrane may persist and develop into chronic otitis media

Secondary complications involve the mastoid (mastoiditis) meningitis, or brain abscess (rare)

Management

With early and appropriate broad-spectrum antibiotic therapy, otitis media may clear with no serious sequelae. If drainage occurs an antibiotic preparation may be prescribed

Patient must take antibiotic as prescribed and must complete all the prescribed medication.

Outcome depends on efficiency of antibiotic therapy, virulence of bacteria and physical status of patient.

Myringotomy (tympanotomy)

If mild cases of otitis media are treated effectively, a myringotomy may not be necessary. If it is an incision is made into the tympanic membrane to relieve pressure and to drain serous or purulent fluid from the middle ear.

This painless procedure usually take less than 15 minutes.

If episodes of acute otitis media recur and there is no contraindication, a ventilating pressure-equalizing tube may be inserted.

Chronic Otitis media

Chronic otitis media results from repeated episode of acute otitis media, causing irreversible tissue pathology and persistent perforation of the eardrum. Chronic infections of the middle ear cause damage to the tympanic membrane can destroy the ossicles and can involve the mastoid.

Clinical Manifestations

Symptoms may be minimal with varying degrees of hearing loss and a persistent or intermitted foul-smelling otorrhea (discharge)

Pain may be present if acute mastoiditis occurs when mastoiditis is present postauricular area is tender; erythema and edema may be present.

Chloasmata (sac fluid with degenerated skin and sebaceous material) may be present as white mass behind the tympanic membrane visible through an otoscope. If untreated, the cholesteatoma continues to grow and destroys structures of the temporal bone, possibly causing damage to the facial nerve and horizontal canal and destruction of other surround structures. Auditory tests often show a conductive or mixed hearing loss.

Medical Management

Careful suctioning and cleansing of the ear are done under microscopic guidance.

Antibiotic drops are instilled or antibiotic powder is applied to treat purulent discharge.

Tympanoplasty procedures (myringoplasty and more extensive types) may be performed to prevent recurrent infection, reestablish middle ear function, close the perforation and improve hearing.

Mastoidectomy may be done to remove cholesteatoma.

Ossiculoplasty may be done to reconstruct the middle ear bones to restore hearing.

Mastoiditis

Mastoiditis is an inflammation of the mastoid resulting from an infection of the middle ear (otitis media).

Since the discovery of antibiotics, acute mastoiditis has been rare. Chronic mastoiditis can lead the formation of cholesteatoma (ingrowth of the skin of the external layer of the eardrum into middle ear) if mastoiditis.

Mastoiditis Causes

mastoiditis most often develops as a result of a middle ear infection. Bacteria from the middle ear can travel into the air cells of the mastoid bone.

Less commonly, a growing collection of skin cells called a cholesteatoma, may block drainage of the ear, leading to mastoiditis.

Clinical Manifestation

Pain and tenderness behind the ear (postauricular)

Discharge from middle ear (otorrhea)

Mastoid area that become erythematous and edematous

Otoscopic evaluation of tympanic membrane reveals chelesteatoma.

Mastoiditis Complications

Mastoiditis complications may include:

1. Facial paralysis
2. Nausea, vomiting, vertigo (labyrinthitis)
3. Hearing loss
4. Brain abscess or meningitis
5. Vision changes or headaches (blood clots in the brain)

Mastoiditis Diagnosis

Any earache with fever or posterior ear tenderness, redness or swelling should be evaluated by a doctor. The doctor will first look for infection inside the ear with otoscope.

Mastoiditis is uncommon without a coinciding ear infection. A sample of the infected ear fluid should be collected for culture.

If complicated, severe or chronic mastoiditis is suspected pt will be referred for a CT scan to image the mastoid area.

If a pocket of fluid or pus is found anywhere (in the ear, neck, mastoid, spine) it will need to be drained and then cultured so antibiotics can be tailored to the bug found.

Medical Management

General symptoms are usually successful treated with antibiotics

Occasionally myringotomy is required

Surgical Management

If recurrent or persistent tenderness, fever, headache and discharge from the ear are evident, mastoidectomy may be necessary to remove the cholesteatoma and gain access to diseased structures.

Otosclerosis

Involves the stapes and is thought to result from the formation of new abnormal spongy bone especially around the oval window with resulting fixation of the stapes.

The efficient transmission of sound is prevented because the stapes cannot vibrate and carry the sound as conducted from malleus and incus to the inner ear.

Otosclerosisis more common in women and frequently hereditary and pregnancy may worsen it.

Otosclerosis Clinical Manifestations

One or both ears conductive or hearing loss

Tinnitus

Otoscopic reveals normal tympanic membrane

Rinne test bone conduction is better than air conduction

Audiogram confirms conductive hearing loss or mix loss especially lov
frequencies.

Otosclerosis Medical Management

Sodium fluoride can mature the abnormal spongy bone growth and prevent the breakdown of the bone tissue.

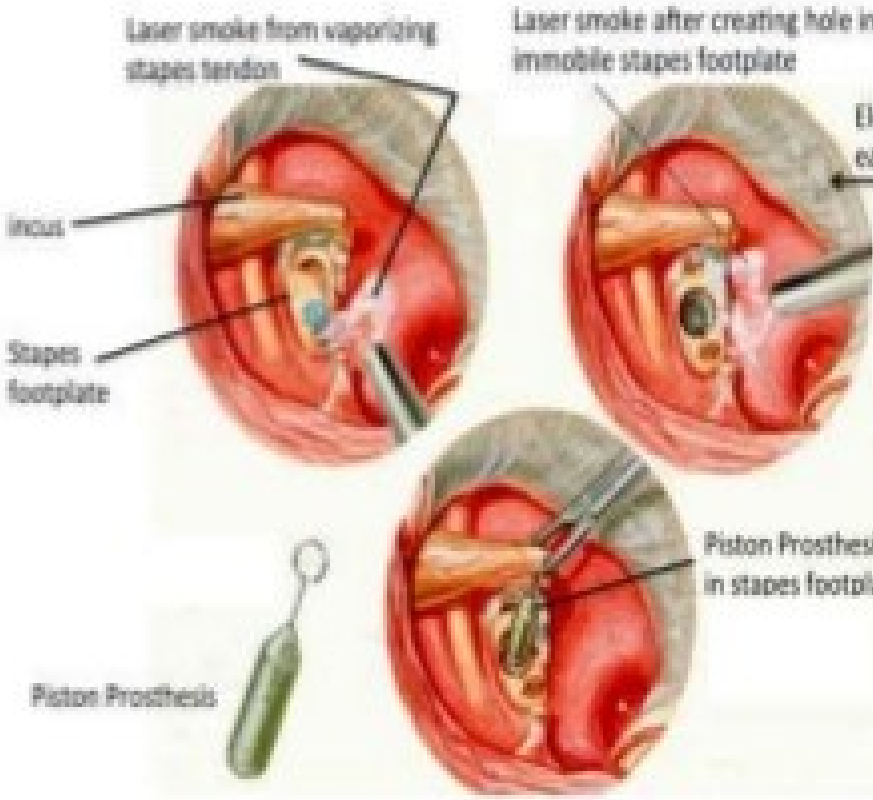
Amplification with a hearing aid may help.

Surgical Management Of Otosclerosis

Stapedectomy or Stapedotomy

Stapedectomy

Stapedotomy



Laser Stapedotomy: Middle ear from surgeon's microscopic view

Meniere's disease

Meniere's disease is a disorder that affects the inner ear. The inner ear is responsible for hearing and balance. The condition causes vertigo, the sensation of spinning. It also leads to hearing problems and a ringing sound in the ear. Meniere's disease usually affects only one ear.

The National Institute on Deafness and Other Communication Disorders (NIDCD) estimates that 615,000 people in the United States have Meniere's disease. Around 45,500 people are diagnosed each year. It's most likely to occur in people in their 40s and 50s.

Meniere's disease causes

The cause of Meniere's disease isn't known, but scientists believe it's caused by changes in the fluid in tubes of the inner ear.
Other suggested causes include autoimmune disease, allergies, and genetics.

Meniere's Disease Symptoms

- Meniere's disease symptoms tend to come on as "episodes" or "attacks." These symptoms include:

vertigo, with attacks lasting anywhere from a few minutes to 24 hours

loss of hearing in the affected ear

tinnitus, or the sensation of ringing, in the affected ear

aural fullness, or the feeling that the ear is full or plugged

loss of balance

headaches

nausea, vomiting, and sweating caused by severe vertigo

Someone with Meniere's disease will experience at least two to three of the following symptoms at one time:

vertigo

hearing loss

tinnitus

aural fullness

Meniere's Disease Diagnostic Tests

A hearing test, or audiometry, is used to determine if you're experiencing hearing loss. In this test, pt 'll put on headphones and hear noises of a variety of pitches and volumes and

Auditory brainstem response (ABR) test checks the function of the hearing nerves and the hearing center in the brain.

Balance tests are performed to test the function of inner ear.. The balance test most commonly used to test for Meniere's disease is **electronystagmography (ENG)** is done to measure the electrical activity in the inner ear. .

Other tests like, head MRI or a cranial CT scan to assess possible problems with brain.

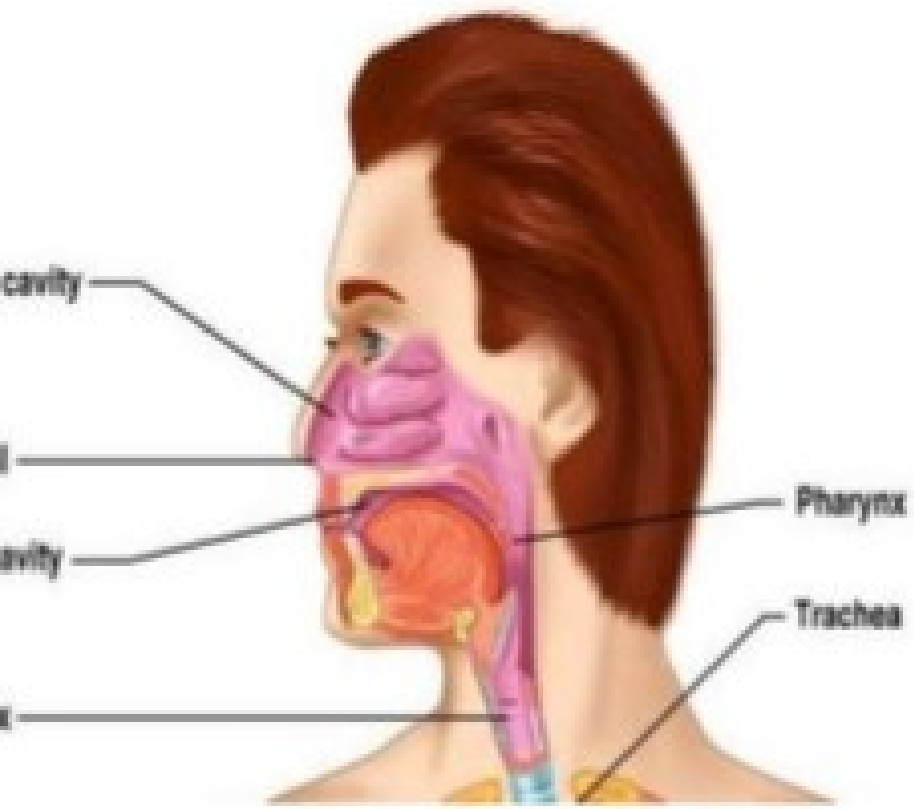
Meniere's disease treatment

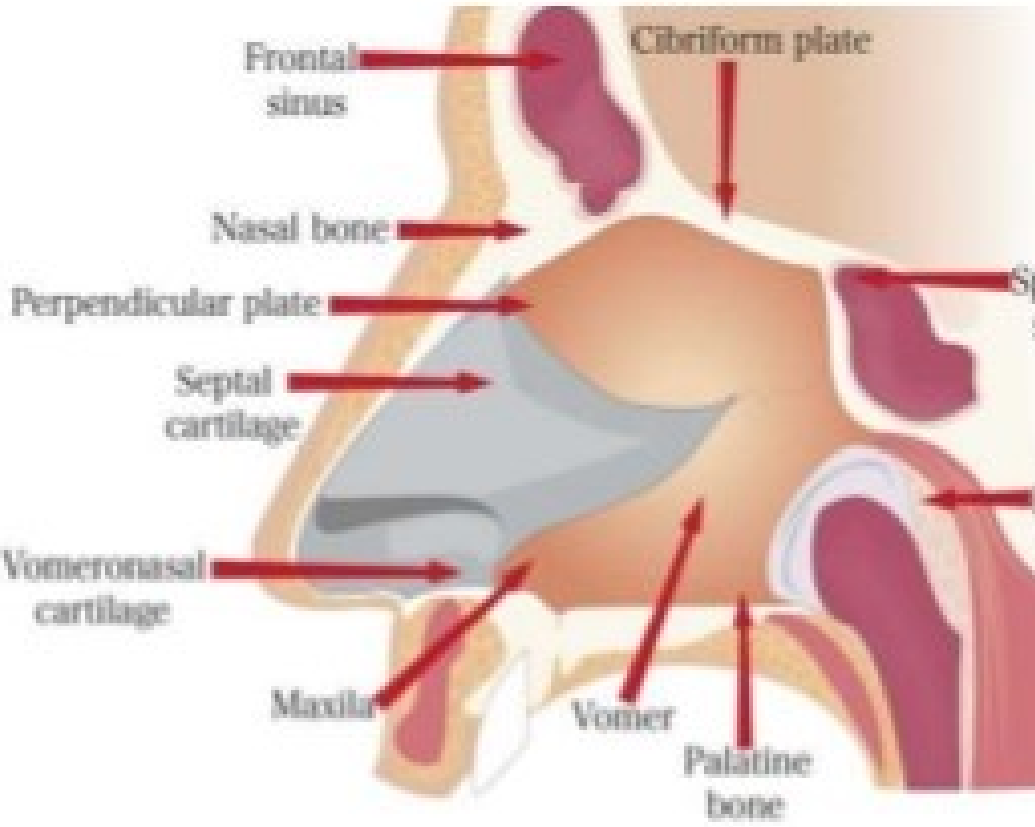
Medications include antiemetic, or anti-nausea medication. a diuretic to help reduce the amount of fluid in your body. Your doctor can also inject medication into your inner ear by way of your middle ear to help reduce vertigo symptoms

Physical therapy Vestibular rehabilitation exercises can improve symptoms of vertigo. These exercises help to train the brain to account for the difference in balance between of two ears. A physical therapist can teach pt these exercises.

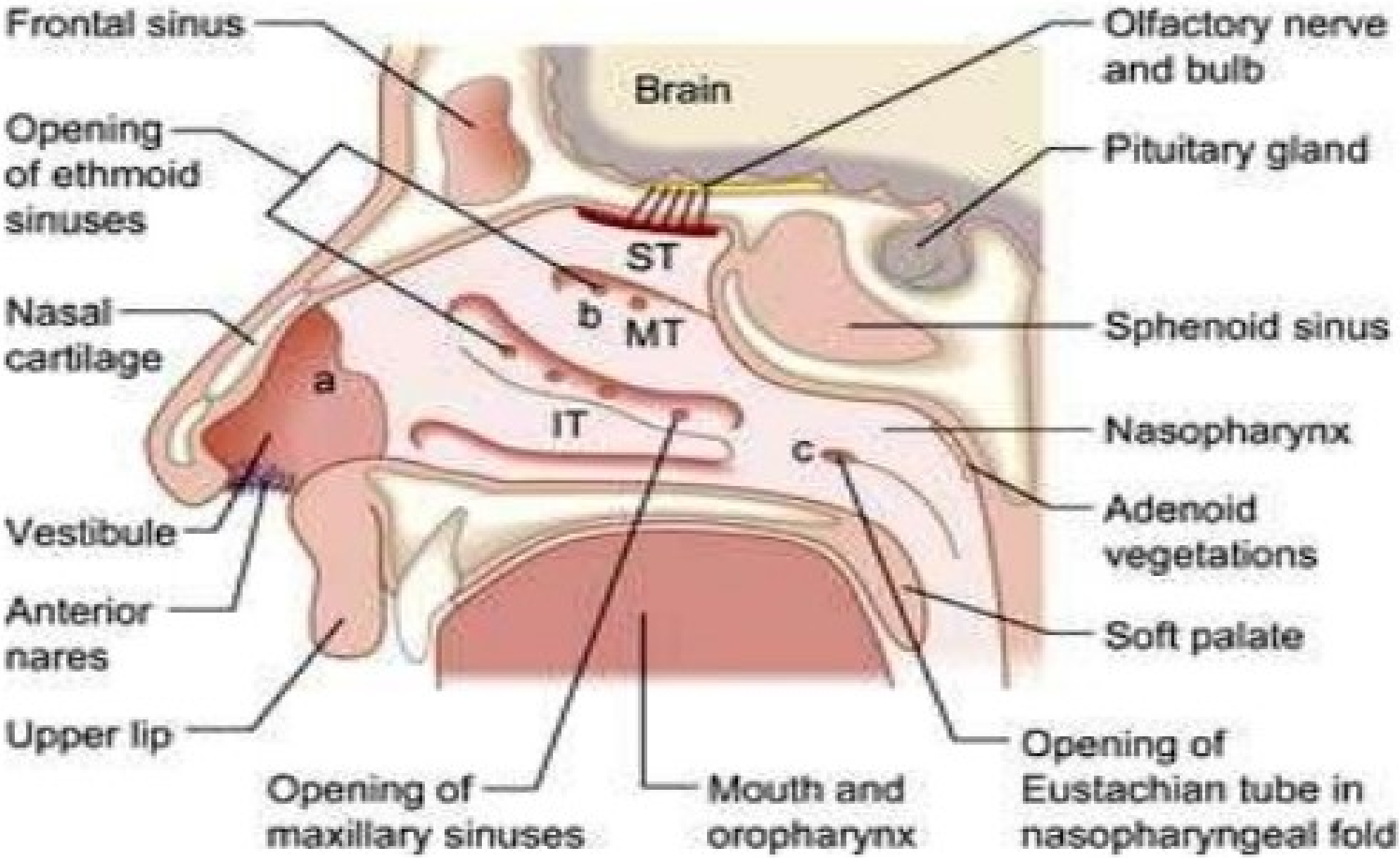
Surgery Most people don't require surgery, but it's an option for those who have severe attacks and haven't had success with other treatments. An **endolymphatic sac procedure** is done to help decrease the production of fluid and promote fluid drainage in the inner ear.

2- Nose





Anatomy And Physiology Of The Nose


Frontal sinus
Opening of ethmoid sinuses
Nasal cartilage
Vestibule
Anterior nares
Upper lip
Opening of maxillary sinuses
Brain
ST
b
MT
a
IT
c
Mouth and oropharynx
Olfactory nerve and bulb
Pituitary gland
Sphenoid sinus
Nasopharynx
Adenoid vegetations
Soft palate
Opening of Eustachian tube in nasopharyngeal fold

Assessment/Examination of the nose

Full nose examinations assess the function, airway resistance and occasionally sense of smell. It includes looking into the mouth and pharynx. Common symptoms of nasal disease include:

Airway obstruction.

Rhinorrhea (runny nose).

Sneezing.

Loss of smell (anosmia).

Facial pain caused by sinusitis.

Snoring (associated with nasal obstruction).

Assessment of the nose/ History

The following issues should be covered:
Allergies/atopic disease.
Smoking.
Pets at home.
Occupation.
History of previous surgery.
Previous trauma.
General medical history.
Seasonal or daily variation in symptoms.
Inspection of the nose

Examination of the Nose

Inspection of the nose

First look at the external nose. Ask the patient to remove any glasses. Look at the nose from the front and side for any signs of the following:

Size and shape.

Obvious bend or deformity: a deviated nose is often best looked at from above.

Swelling.

Scars or abnormal creases.

Redness (evidence of skin disease).

Discharge or crusting.

Offensive smell.

Common Condition Of Nose

- Rhinitis
- Epistaxis
- Nasal obstruction

RHINITIS

Defined as inflammation of the nasal mucosa characterized by two or more of the following symptoms:

- nasal congestion
- anterior/posterior rhinorrhea
- sneezing
- itchy nose

ALLERGIC RHINITIS

occurs when these nasal symptoms are the result of IgE-mediated inflammation following exposure to an allergen

Prevalence

400 million suffers worldwide

> 20% of population in UK

All ages are affected, peaks in teens

Boys more affected than girls but equalizes after puberty

Most will be managed at Primary Health Care level

30% of patients with AR have asthma

The majority of patients with asthma have AR

AR is a major risk factor for poor asthma control

All patients with AR should be assessed for asthma

Immunoglobulin E (IgE) are antibodies produced by the immune system.

ALLERGIC RHINITIS AND OTHER COMORBIDITIES

Up to 80% of patients with bilateral chronic sinusitis have AR

Otitis media

Conjunctivitis

Lower respiratory tract infections

Dental problems – malocclusion, discoloration

Sleep disorders

ALLERGIC RHINITIS (ARIA)

- Subdivided into

  intermittent (IAR) .v. persistent (PER)

- Severity classified as

  mild .v. moderate/severe

ALLERGIC RHINITIS (ARIA) Symptoms

Intermittent symptoms

< 4 days per week

Or < 4 weeks

Moderate-severe one or more items

Abnormal sleep.

Impairment of daily activities, sport, leisure.

Problems caused at school or work.

Troublesome symptoms.

Persistent symptoms

> 4 days per week and > 4 weeks

Mild

Normal sleep.

Normal daily activities.

Normal work and school.

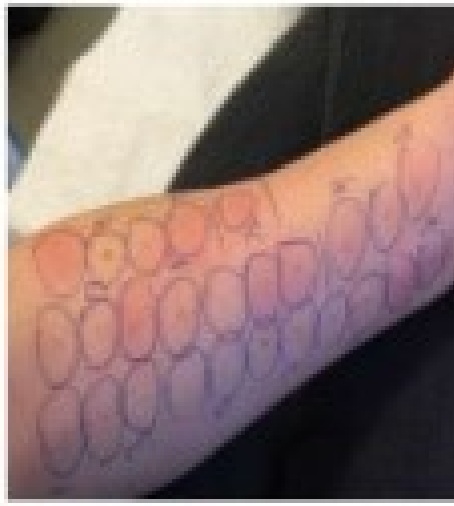
No troublesome symptoms.

DIAGNOSIS

History and Examination

Skin prick test

Radio allegro absorbent tests (RAST)for specific IgE (Nasal allergen challenge)



RAST rating	IgE level (KU/L)	comment
0	< 0.35	ABSENT OR UNDETECTABLE ALLERGE
1	0.35 - 0.69	LOW LEVEL OF ALLERGEN SPECIFIC
2	0.70 - 3.49	MODERATE LEVEL OF ALLERGEN SPE
3	3.50 - 17.49	HIGH LEVEL OF ALLERGEN SPECIFIC
4	17.50 - 49.99	VERY HIGH LEVEL OF ALLERGEN SPE
5	50.0 - 100.00	VERY HIGH LEVEL OF ALLERGEN SPE
6	> 100.00	EXTREMELY HIGH LEVEL OF ALLERGE

TREATMENT

EDUCATION/ALLERGEN AVOIDANCE

PHARMACOTHERAPY

IMMUNOTHERAPY

Others – Nasal douching

SURGERY

EDUCATION/ALLERGEN AVOIDANCE

Explanation of disease, progress (typical progression of allergic),and it's treatments

Genetics

Breastfeeding

Parental smoking

Allergen avoidance – primary/secondary

PHARMACOTHERAPY

Topical Nasal Treatments	Oral Treatments
• Corticosteroids • Antihistamines • Chromones • Anticholinergics • Decongestants	• Antihistamines • Corticosteroids • Antileukotrienes • Decongestants

IMMUNOTHERAPY

Involves repeated administration of an allergen extract to induce a state of immunological tolerance

More effective in limited spectrum of allergies in particular seasonal pollen allergy

Severe symptoms failing to respond to usual prognosis (Px)

Subcutaneous injection/sublingual route

Studies indicate that 3 years therapy necessary

OTHER TREATMENTS

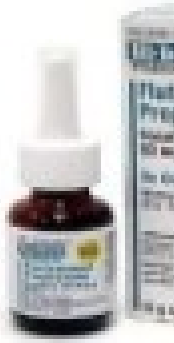
Nasal douches

- adjuvant to other treatments
- studies indicate can be useful in children with seasonal rhinitis
- pregnancy

Allergic Rhinitis and its Impact on Asthma (ARIA) Recommendations

Topical corticosteroids and oral antihistamines (non-sedating) form the mainstay of treatment

The newer topical steroids e.g. Mometasone furoate and Fluticasone propionate were highest recommended



Other drugs should only be considered as second-line treatment

Immunotherapy in selected patients can be highly effective.

Epistaxis (NASAL BLEEDING)

Epistaxis is agreek word meaning nose bleed. has been a part of the human experience from earliest times

Hippocrates commented that holding pressure on the nose helped to abate bleeding.

Kiesselbach and Little(1879) were the first to identify the nasal septum's anterior plexus as a source of nasal bleeding.

Pilz(1869) was the first to surgically treat epistaxis with arterial ligation

Local causes

Epistaxis digitorum (nose picking) &Trauma

Foreign bodies

Intranasal neoplasm or polyps

Irritants (e.g., cigarette smoke)

Medications (e.g., topical corticosteroids)

Rhinitis, Sinusitis acute and chronic

Septal deviation , Septal perforation

Adenoids

Vascular malformation or telangiectasia(spider veins)

Systemic causes

Hemophilia

Hypertension

Leukemia

Liver disease (e.g., cirrhosis, Factor deficiency)

Medications e.g., aspirin, anticoagulants, nonsteroidal anti-inflammatory drugs

Platelet dysfunction & Thrombocytopenia

Others

Diffuse oozing, multiple bleeding sites, or recurrent bleeding may indicate a systemic process

DO & DO NOT IN Epistaxis's Nursing Interventions

DO

- Put on protective gear, including gown, gloves, and goggles.
- Quickly assess the ABCs (airway, breathing, and circulation) and support them as indicated. Reassure the patient.
- Ensure bedside suction is functioning properly. Provide an emesis basin and issues. Tell her to spit blood into the basin if necessary. This helps prevent nausea nd vomiting and lets you estimate the amount of bleeding.
- Obtain vital signs and SpO2 level, and assess her breath sounds. Administer upplemental oxygen via facemask if needed.
- Continue to monitor vital signs closely.
- Assess for signs and symptoms of hemodynamic instability, including change in nental status, pallor, diaphoresis, hypotension, tachycardia, and tachypnea.

DO & DO NOT IN Epistaxis's Nursing Interventions

f bleeding is significant, establish vascular access, place the patient on a ardiac monitor, and begin fluid resuscitation with a crystalloid solution, as ordered. Obtain specimens for blood work, including complete blood cell ount and coagulation profile, as ordered.

Obtain a history about previous nosebleeds, other bleeding episodes, easy ruising, and medication use, especially use of aspirin and other onsteroidal anti-inflammatory drugs (NSAIDs), antiplatelet agents, warfarin, nd herbal products.

If bleeding persists, assist in preparing the epistaxis tray and a headlamp. Make sure lighting is adequate. Assist the healthcare provider as needed luring the exam and treatment. Reassure the patient, monitor vital signs, nd assess for hypoxia.

DO & DO NOT IN Epistaxis's Nursing Interventions

- *After bleeding is controlled, reassess the patient and provide oral care.*
- *If packing is used, especially posterior packing, monitor for respiratory ompromise. Tell the patient to report signs and symptoms of infection and each her about any prescribed antibiotics. If she has posterior packing, she'll dmitted to the hospital. A patient with anterior packing will follow up with a ar, nose, and throat specialist as an outpatient.*
- *Instruct the patient to avoid exerting herself, forcefully blowing her nose, or ending over during the first 24 hours. She should also avoid NSAIDs, alcohol everages, and smoking for 5 days. Tell her to apply water-soluble ointment t er lips and nostrils while packing is in place and to use a cool-mist room umidifier. Advise her to take steps to prevent constipation and straining, wh ncreases the risk of more bleeding.*

DO & DO NOT IN Epistaxis

DON'T

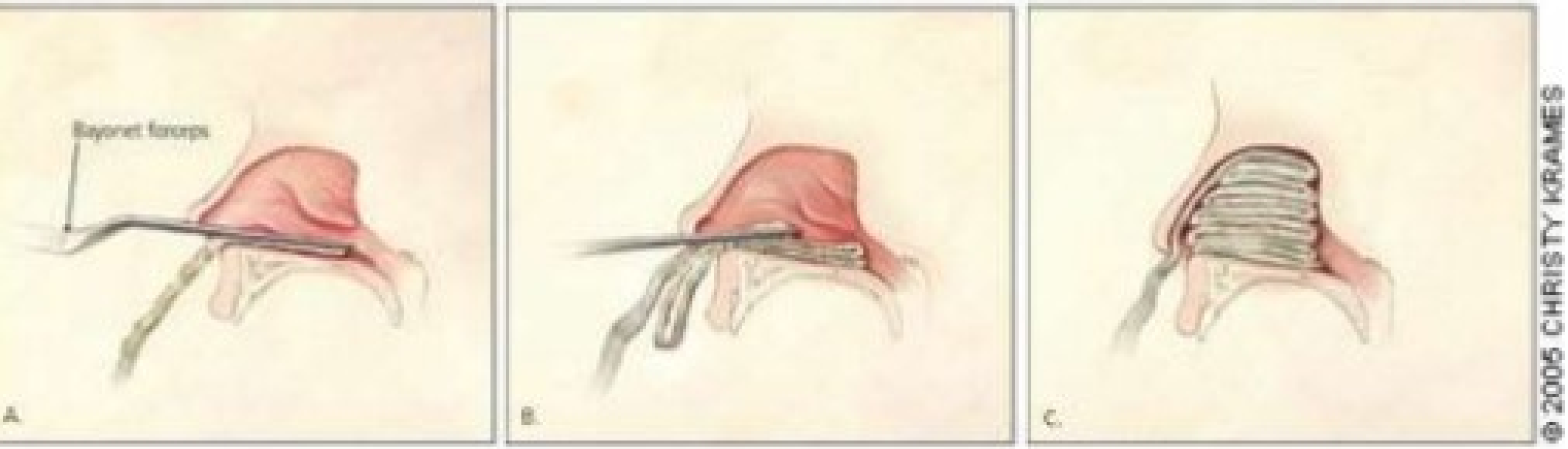
* Don't leave the patient unattended during epistaxis.

* Don't underestimate the amount of blood that can be lost from epistaxis

Patient teaching for Epistaxis

1. Firmly pinch the entire soft part of the nose just above the nostrils.
2. Sit and lean forward (this will ensure that blood and other secretions do not go down your throat).
3. Breathe through your mouth.
4. Hold this position for 5 minutes. If bleeding continues, hold the position for an additional 10 minutes. If bleeding does not stop, go to the emergency department.

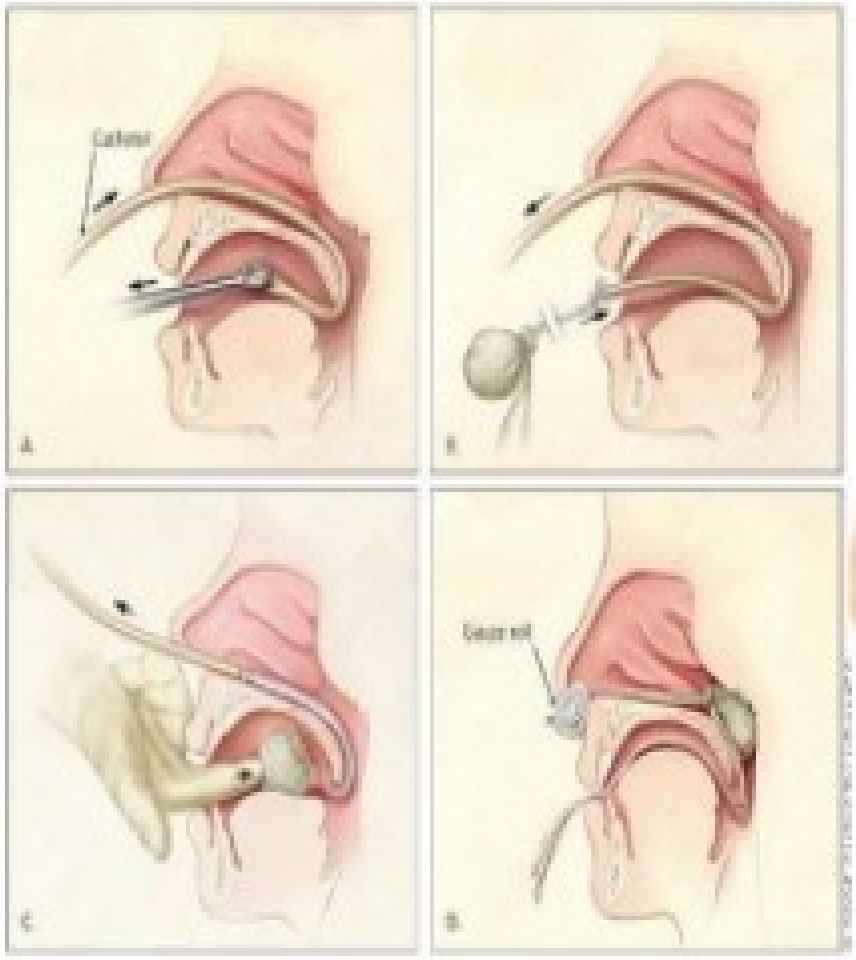
Anterior nasal packing



A patient with anterior packing will follow up with an ear, nose, and throat specialist as an outpatient.

Post nasal packing

packing is used, especially
osterior packing, monitor for
spiratory compromise. Tell the
tient to report signs and
mptoms of infection and teach
er about any prescribed
tibiotics. If she has posterior
acking, she'll be admitted to the
ospital.



How to avoid Epistaxis

Avoid damaging the nose and excessive nose-picking.

Seek medical treatment for any disease causing the nosebleeds.

Get a humidifier if you live in a dry climate or at high altitude.

Nursing care plan for Epistaxis

Nursing diagnosis

Risk for Bleeding

Goal: minimize bleeding

Expected Outcomes: No bleeding, vital signs within normal limits, no anemia.

Interventions:

Monitor the patient's general condition

Monitor vital signs

Monitor the amount of bleeding patients

Monitor the event of anemia

Collaboration with the doctor about the problems that occur with bleeding: transfusion, medication.

Nursing care plan for Epistaxis

Nursing diagnosis

Ineffective airway clearance

Goal: to be effective airway clearance

Expected Outcomes: Frequency of normal breathing, no additional breath sounds, do not use additional respiratory muscles, dyspnea and cyanosis does not occur.

Independent

Assess the sound or the depth of breathing and chest movement.

Rational: Decreased breath sounds may lead to atelectasis, Ronchi, and wheezing showed accumulation of secretions.

Note the ability to remove mucous / coughing effectively

Rational: bright lumpy or bloody sputum may result from damage to lungs or bronchial injury.

Give Fowler's or semi-Fowler position.

Rational: Positioning helps maximize lung expansion and reduce respiratory effort.

Clean secretions from the mouth and trachea

Rational: To prevent obstruction / aspiration.

Maintain a fluid inclusion at least as much as 250 ml / day unless contraindicated.

Rational: Helping dilution of secretions.

Collaboration

Give medication in accordance with the indications mucolytic, expectorant, bronchodilator.

Rational: Mucolytic to reduce cough, expectorant to help mobilize secretions, bronchodilators reduce bronchial spasms and analgesics are given to reduce discomfort.

Nasal Polyps

n – cancerous growth (benign)

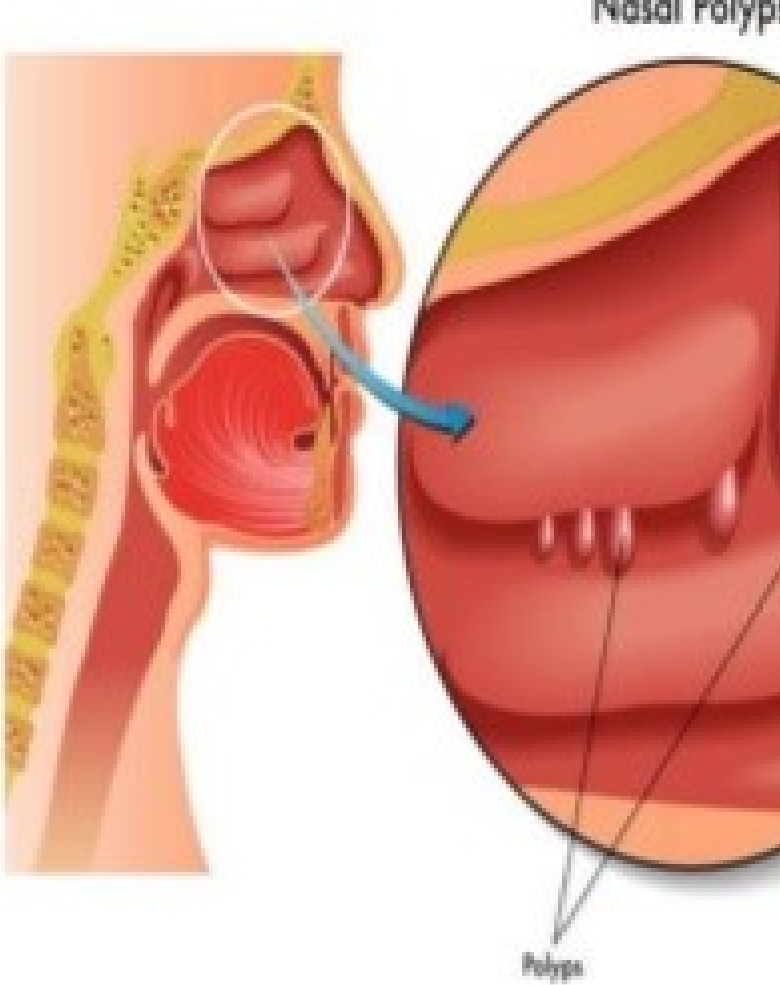
velop on the lining of the passages at uses

owth :

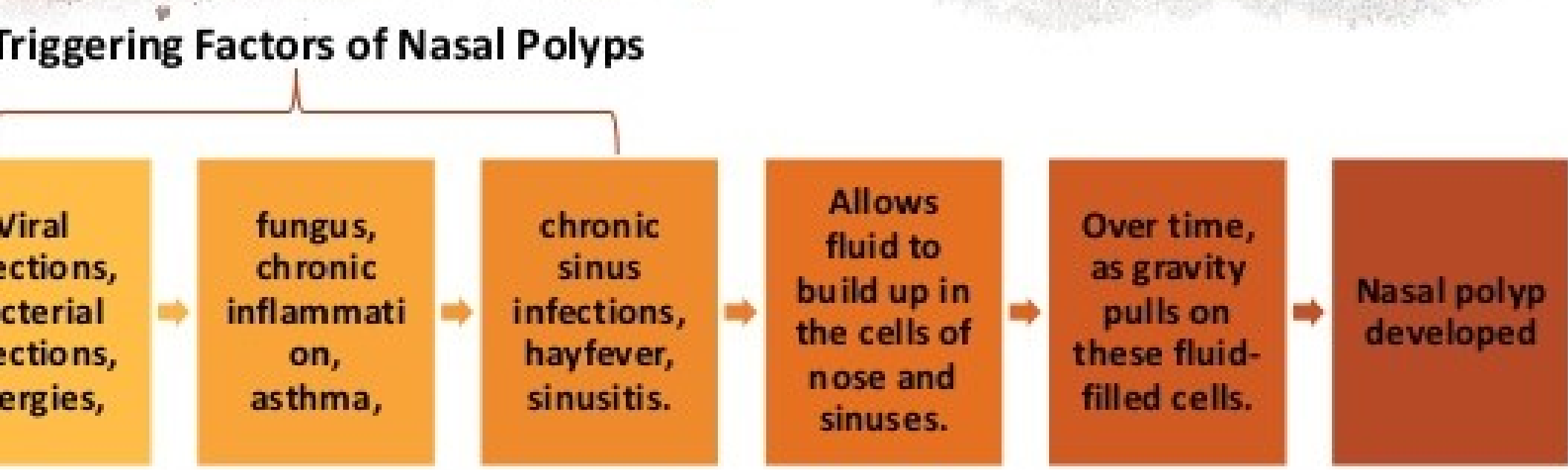
ll growth(may cause no problem)

growth(cause many complications)

me in many sizes and shapes.



Pathophysiology



Symptoms of Nasal Polyps

- If pt have any symptoms, they may include:

1. Stuffy or blocked nose
2. Sneezing
3. Postnasal drip
4. Runny nose
5. Facial pain
6. Trouble with sense of smell
7. Loss of taste
8. Itching around the eyes
9. Infections

reatment of Nasal Polyps

nfirmation of nasal polyps by a nasal endoscope, may take a small sample biopsy) of the polyp.

ll probably start with a nasal corticosteroid spray to shrink or even get rid o sal polyps

some cases Oral corticosteroids such as prednisone for a week.

general, medications such as antihistamines and decongestants aren't great anaging nasal polyps. But pt may need antihistamines to control allergies or tibiotics if pt have an infection before pt start on steroids.

nasal sprays don't work. In such cases, surgery may be an option where nasa escope is used to removes nasal polyps.

rgery helps in most cases. It may be less effective if pt have nasal polyps, ast d aspirin sensitivity. If that's medication may be more helpful.

Prevention of Nasal Polyps

Nurse need to educate the patient the following :

1. Not everyone will be able to prevent nasal polyps. However, there are a few ways you may be able to help yourself. The strategies include the following:
2. Follow your doctor's instructions on taking your allergy and asthma medications.
3. Avoid breathing airborne allergens or irritants that lead to inflammation of your nose and sinus cavities.
4. Practice good hygiene.
5. Use a humidifier in your home to help moisten your breathing passages.
6. Use a saline nasal rinse or spray to remove allergens or other irritants that may cause nasal polyps.

Care Of The Patient Undergo Nasal Surgery

- **Assessment**

Pain, pressure, anxiety and dyspnea.

Monitor vital signs to detect signs of excessive blood loss

Number of dressings saturated and frequency of change.

Bleeding from the nasal cavity may flow into throat and be swallowed although the dressing remains dry.

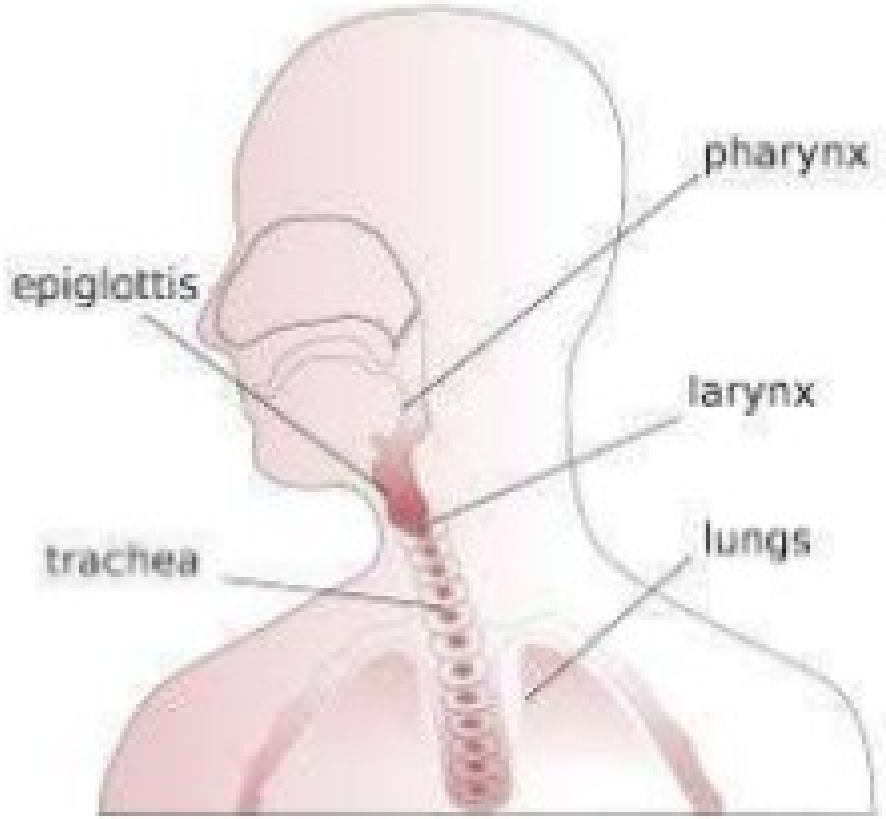
Check back of throat for bleeding; be alert for frequent swallowing.

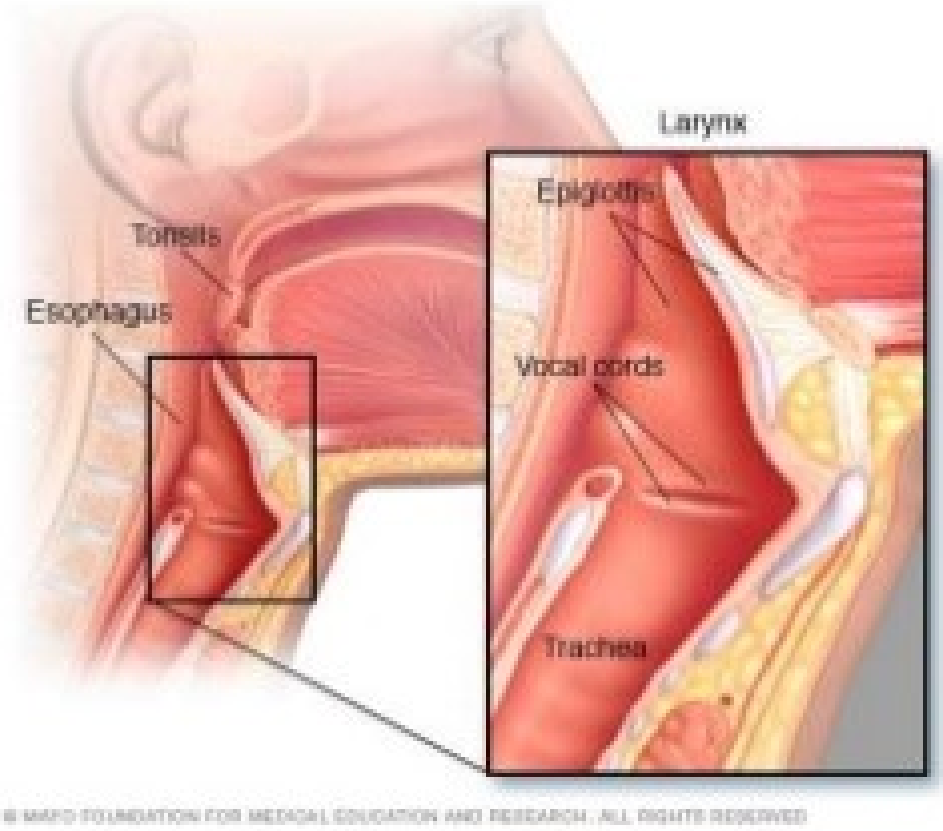
Inspect vomitus and stool for blood (bright red or ''coffee ground '' emesis and red, maroon or black stool).

Care Of The Patient Undergo Nasal Surgery

- **Nursing diagnosis :**
  - Decrease cardiac output
  - Acute pain
  - Impaired gas exchange
  - Disturbed body image

3. Throat





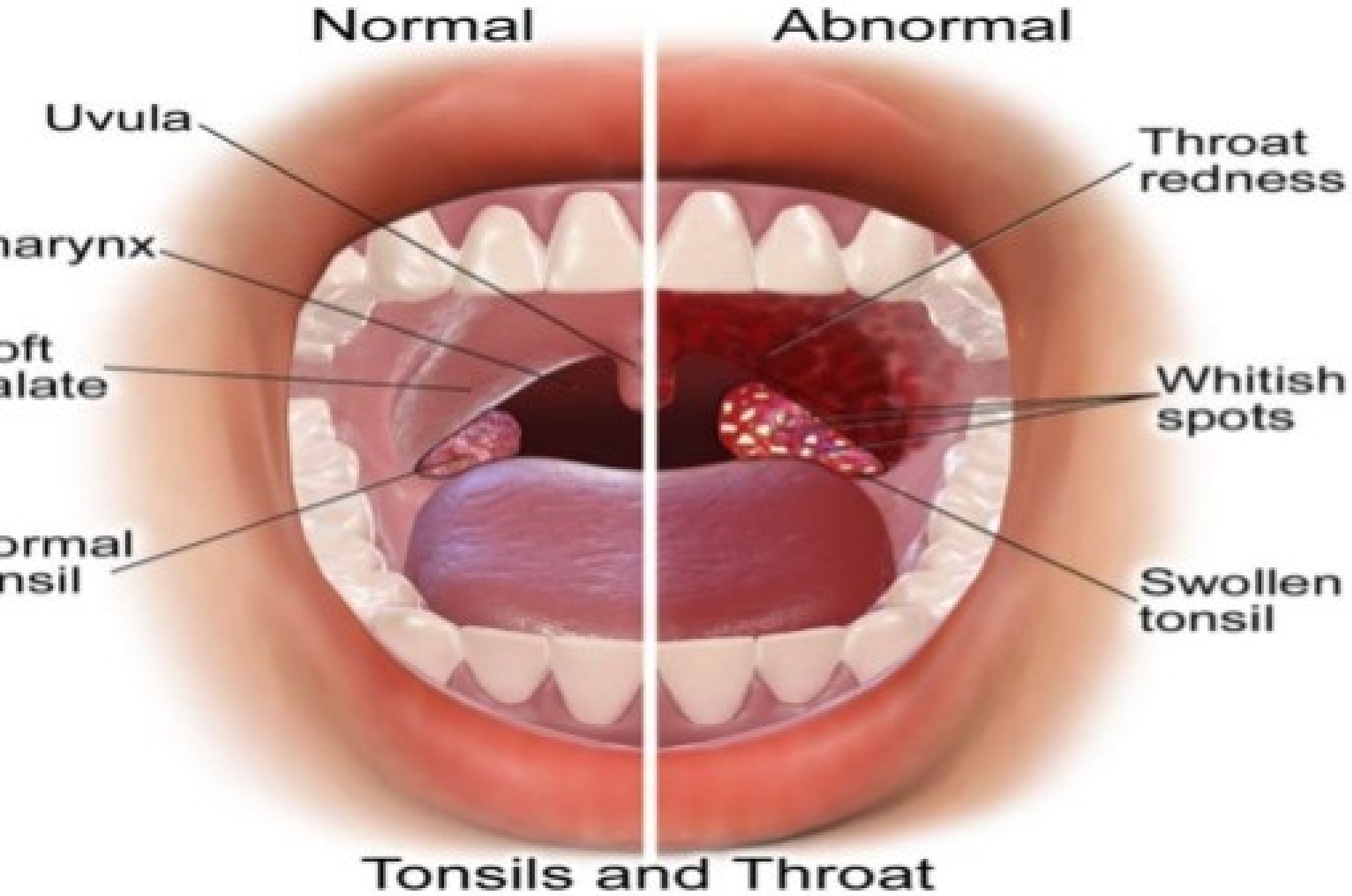
roat includes esophagus, windpipe (trachea), voice box (larynx), tonsils and epiglottis.

Common condition of throat

- Acute pharyngitis
- Acute follicular tonsillitis
- Peritonsillar abscess
- Laryngitis

Management of patient with :

1. Laryngectomy
2. Tracheostomy



Tonsils and Throat

Acute pharyngitis

Acute pharyngitis is an inflammatory syndrome of the pharynx and/or tonsils caused by several different groups of microorganisms.

Most common **throat disorder**

Usually subsides in 3 to 10 days unless complications occur.

Etiology of Acute pharyngitis

- Viral or bacterial infection
- Beta-hemolytic streptococcus (15%to 20% of acute pharyngitis cases)
- Mononucleosis
- Streptococcus bacterial infections(in children)
- *Candida* infection is common as a source of sore throat in immunocompromised individuals, including those undergoing chemotherapy or oropharyngeal irradiation for cancer.

Pathophysiology

Acute pharyngitis results from infection and inflammation of the pharynx, the details of which are both pathogen- and host-specific.

Most commonly the disease is localized to the pharynx alone, but rarely it may be part of a systemic infection (e.g., infectious mononucleosis, tularemia, or HIV).

ncidence of Acute pharyngitis

Widespread among adults who:

Live or work in dusty or dry environments.

Uses their voice excessively

Use tobacco or alcohol habitually

Suffer from chronic sinusitis, persistent coughs, or allergies.

Clinical manifestations of Acute pharyngitis

- **History**

1. Sore throat
2. Slight difficulty swallowing
3. Sensation of lump in the throat
4. Content aggravating urge to swallow
5. Headache
6. Muscles and joint pain

Physical finding

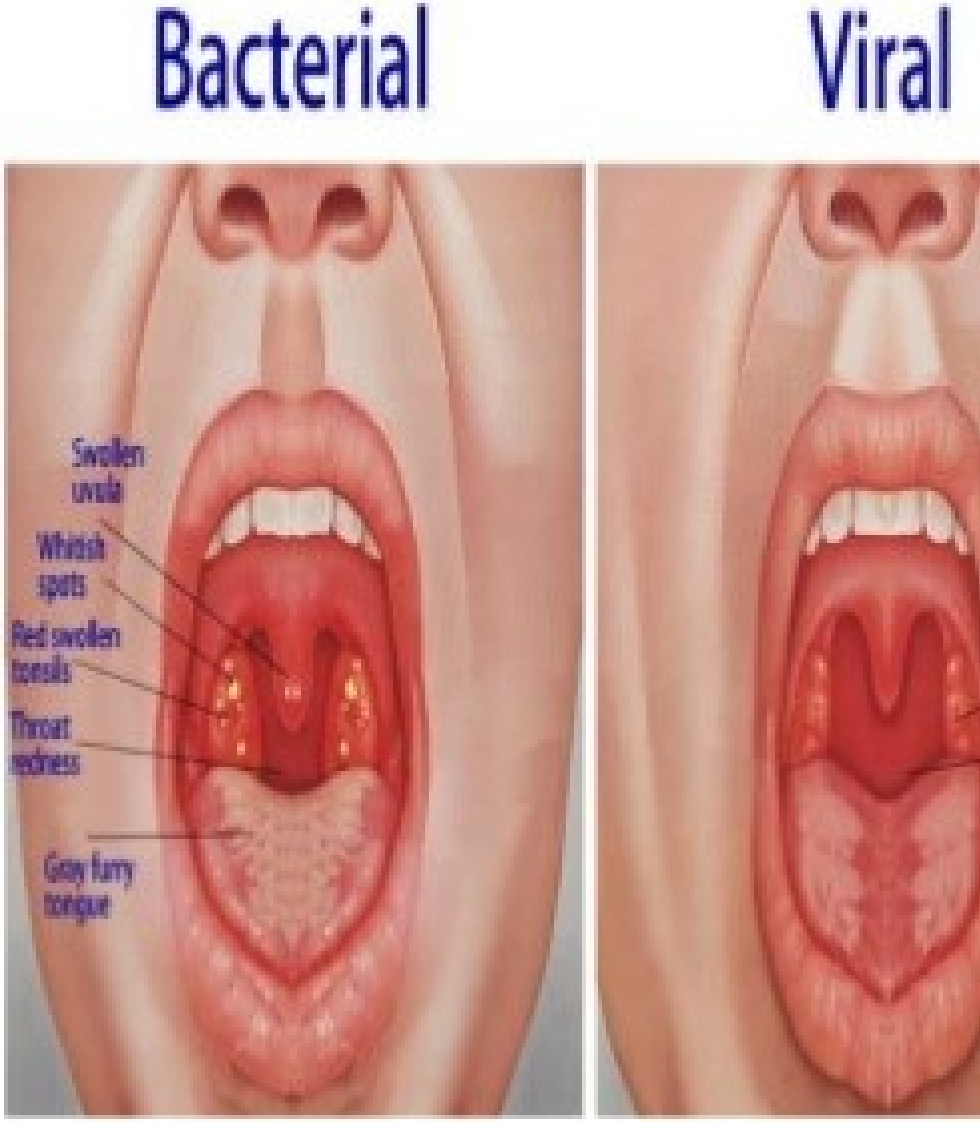
e following symptom complex
rries a 40% to 60% positive
edictive value for GAS pharyngitis.

ollen, Pharyngeal exudates, flecked
nsils.

ver

ck of cough or rhinorrhea.

cterial pharyngitis(Acute inflamed
oat with white patches and yellow
icles & strawberry red tongue,
larged, tender cervical lymph
des)



Test Results

- Lab (throat culture, rapid strep test & WBC)
- Imaging (CT allocate the abscess)

Risk Factors of Acute pharyngitis

nasal colonization with group A Streptococcus (GAS)

GAS-infected contact

sexual activity or abuse

ingestion of nondomestic meats

immunocompromised host

use of inhaled corticosteroids

lack of immunization or vaccine failure

chemotherapy or oropharyngeal irradiation for cancer

Treatment of acute pharyngitis

General (warm saline gargles, hospitalization for dehydration, elimination of the underlying cause & adequate humidification)

Diet (adequate diet, avoidance of citrus juices, easy to swallow food)

Activity (bed rest while febrile)

Medications(anesthetic throat lozenges, analgesics as needed, antibiotics, antifungal agents, antipyretics and equine antitoxins)

Surgical (abscess drainage)

Complications

- Otitis media
- Sinusitis
- Mastoiditis
- Rheumatic fever
- Nephritis

Nursing consideration

Nursing diagnosis (acute pain, fatigue, imbalance nutrition; less than body requirements, impaired oral mucous membrane or risk for deficient fluid volume)

Outcomes (the pt will express feeling of increase comfort decreased pain, verbalizes importance of adequate daily calorie intake , maintain intact mucous membranes or maintain normal fluid volume)

Nursing interventions (administer medication as orders, throat culture as orders, instruct pt to use a warm saline gargles, encourage adequate oral fluid intake and perform meticulous moth care and maintain as restful environment

Patient teaching

- Be sure to cover :

Disorder, diagnostic test and treatment

Importance of completing prescribed antibiotic therapy

Adverse reactions to medications

Avoidance of excessive exposure toair conditioning

Smoking cessation

Ways to minimize environmental sources of throat irritation

Importance of throat cultures

Acute Follicular Tonsillitis

- Inflammation of tonsils
- Common viral infection that's mild and limited duration
- Common characteristics (sore throat, enlarge tonsils)

Etiology Acute Follicular Tonsillitis

Acute tonsillitis

Viral (50–80% of cases): **adenovirus,** EBV, CMV, HSV, rhinovirus, coronavirus, **influenza, and parainfluenza virus**, HIV

Bacterial (15–30% of cases)

Streptococcus pyogenes (most common)

Rarely, Staphylococcus aureus, Streptococcus pneumoniae, Mycoplasma pneumoniae

Recurrent tonsillitis and chronic tonsillitis: polymicrobial infections with aerobic bacteria (typically streptococci, staphylococci, Haemophilus influenzae) and anaerobic bacteria

Pathophysiology of Acute Follicular Tonsillitis

The inflammation response to cell damage by viruses or bacteria results in hyperemia and fluid exudation.

- Incidence

Commonly affects children between age 5 to 10

Tonsils tend to hypertrophy during childhood and atrophy after puberty.

Clinical Manifestations

- Sudden onset of symptoms
- Red and swollen pharynx, tonsillar exudates
- Fever, sore throat, dysphagia
- Painful, swollen cervical lymph nodes
- Foul breath
- If viral: headache, earache, nasal congestion, and cough
- Trismus and changes in voice quality indicate the formation of potentially life-threatening peritonsillar abscess

spasm of the jaw muscles, causing the mouth to remain tightly closed, typically as a symptom of tetanus.

Complications

1. Chronic upper airway obstruction
2. Sleep disturbance, sleep apnea
3. Cor pulmonale
4. Failure to thrive
5. Eating or swallowing disorders
6. Speech abnormalities
7. Febrile seizures
8. Otitis media
9. Cardiac valvular disease
10. Peritonsillar abscesses
11. Glomerulonephritis
12. Bacterial endocarditis
13. Cervical lymph node abscesses

iagnostic test

Adults: assessment based on Centor score (< 2 points makes GAS unlikely); microbiologic testing is indicated in patients that score > 3 points

- Tonsillar exudates (1 point)
- Cervical adenopathy (1 point)
- Fever (1 point)
- No cough (1 point)

icrobiologic testing

Confirmatory tests: rapid antigen detection test and/or throat culture

- **Rapid GAS antigen detection test**
  - Throat swab allows simple and quick detection of group A streptococcal infection (highly specific, sensitivity 70–90%)
  - A negative test should be backed up by throat culture in children and adolescents
- Throat **culture**: to identify pathogen and determine antibiotic sensitivity

ood tests

Inflammatory markers (↑ CRP, ↑ ESR, leukocytosis)

Potential elevation of the antistreptolysin O titer

Treatment

General goal (symptom relief)

Diet (adequate fluid intake)

Activity (rest as needed)

Medications (aspirin or acetaminophen, antibiotics)

Surgery (possible tonsillectomy)

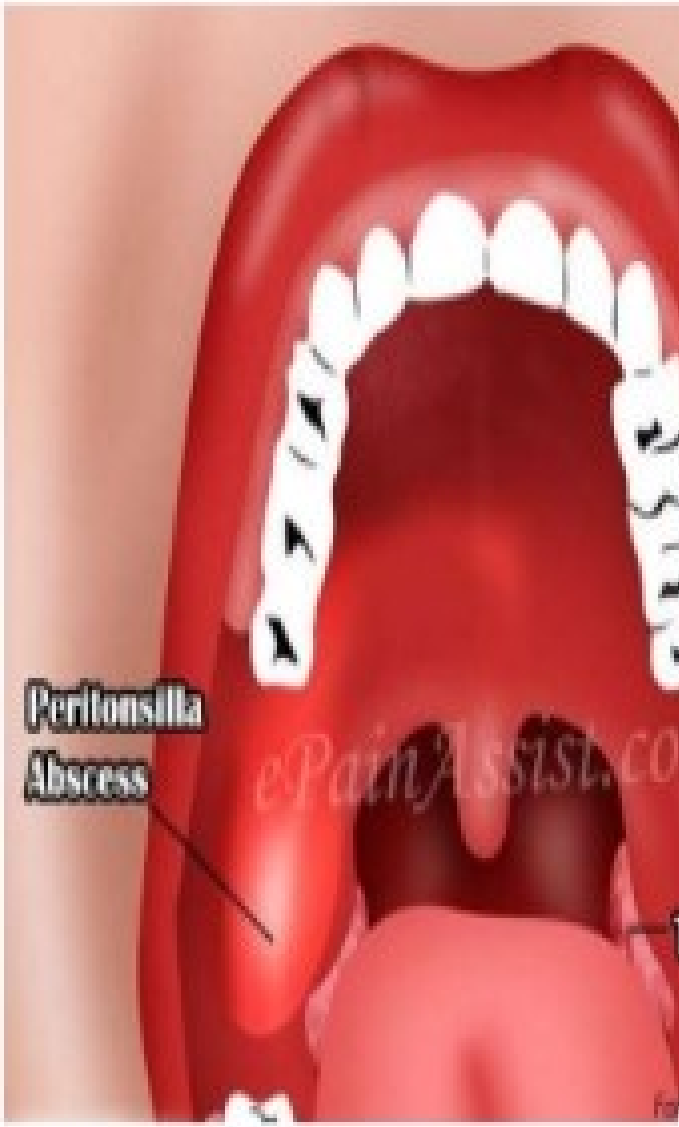
Peritonsillar abscess

is a bacterial infection that usually begins as a complication of untreated strep throat or tonsillitis.

It generally involves a pus-filled pocket that forms near one of tonsils.

most common in children, adolescents, and young adults.

Affects more male than female



Causes of a peritonsillar abscess

usually occur as a complication of tonsillitis.

If the infection breaks out of a tonsil and spreads to the surrounding area, an abscess can form.

Peritonsillar abscesses are becoming less common due to the use of antibiotics in the treatment of strep throat and tonsillitis.

Mononucleosis(commonly referred to as mono) can also cause **peritonsillar abscesses**, as well as **tooth and gum infections**.

In much rarer cases, it's possible for peritonsillar abscesses to occur without an infection.

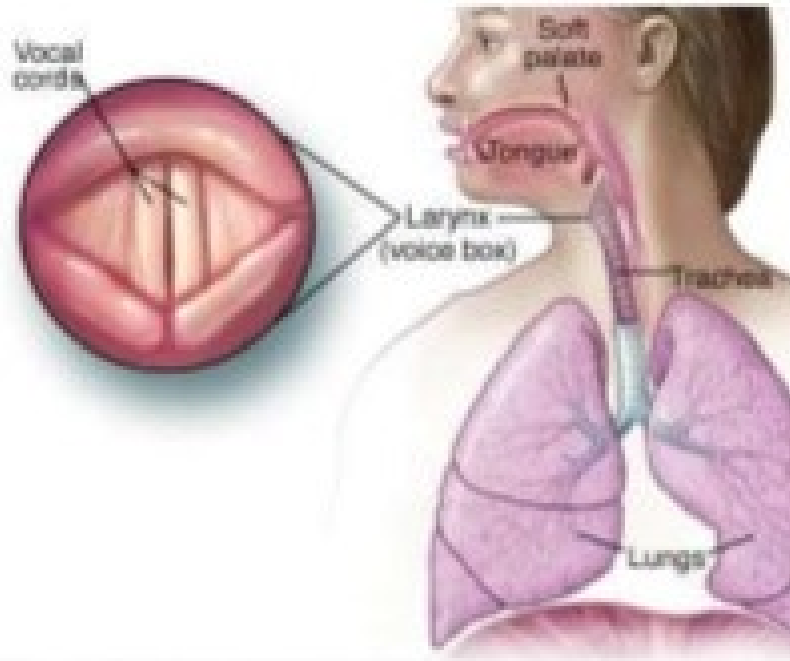
This is **generally due** to **inflammation of the Weber glands**.
(These glands are under tongue and produce saliva).

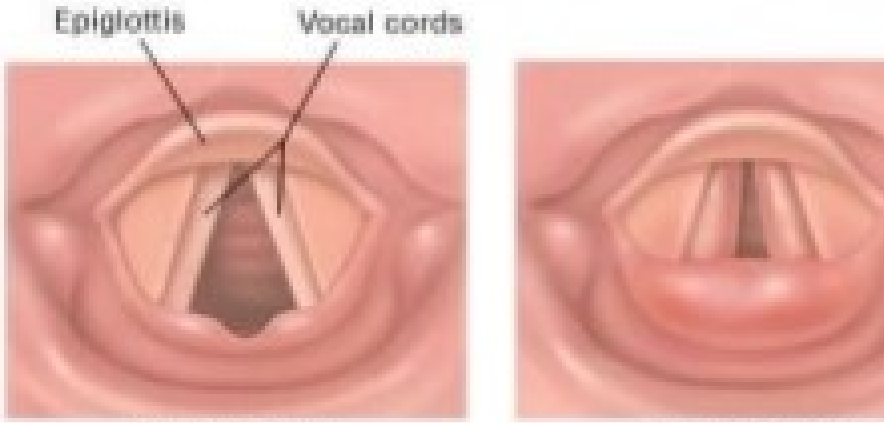
Laryngitis

Laryngitis occurs when voice box or vocal cords become inflamed from overuse, irritation, or infection. Laryngitis can be acute (short-term), lasting less than three weeks.

Or it can be chronic (long-term), lasting more than three weeks.

Many conditions can cause the inflammation that results in laryngitis.





Etiology

- Viral infections similar to those that cause a cold
- Vocal strain, caused by yelling or overusing your voice
- Bacterial infections, such as diphtheria, although this is rare, in large part due to increasing rates of vaccination

Risk factors for laryngitis

Having a respiratory infection, such as a cold, bronchitis or sinusitis

Exposure to irritating substances, such as cigarette smoke, excessive alcohol intake, stomach acid or workplace chemicals

Overusing of voice, by speaking too much, speaking too loudly, shouting or singing

Diagnostic test

- Laryngoscopy.
- Biopsy.

Clinical manifestations of Laryngitis

- laryngitis signs and symptoms can include:

Hoarseness

Weak voice or voice loss

Tickling sensation and rawness of your throat

Sore throat

Dry throat

Dry cough

Treatment

Acute laryngitis often gets better on its own within a week or so. Self-care measures also can help improve symptoms.

Chronic laryngitis treatments are aimed at treating the underlying causes, such as heartburn, smoking or excessive use of alcohol.

Medications used in some cases include:(Antibiotics. Corticosteroids).

Prevention

To prevent dryness or irritation to vocal cords:

Don't smoke, and avoid secondhand smoke.

Limit alcohol and caffeine. These cause to lose total body water.

Drink plenty of water. Fluids help keep the mucus in the throat thin and easy to clear.

Avoid eating spicy foods. Spicy foods can cause stomach acid to move into the throat or esophagus, causing heartburn or gastroesophageal reflux disease (GERD).

Include whole grains, fruits and vegetables in your diet. These foods contain vitamins A E and C, and help keep the mucous membranes that line the throat healthy.

Avoid clearing throat. This does more harm than good.

Avoid upper respiratory infections. Wash own hands often, and avoid contact with people who have upper respiratory infections such as colds.

Laryngectomy

Laryngectomy is the removal of the larynx and separation of the airway from the mouth, nose and esophagus. In a total laryngectomy, the entire larynx is removed. In a partial laryngectomy, only a portion of the larynx is removed

Test yourself.....??

1.what is the term used for inflammation of pharynx??

A) laryngitis
B) pharyngitis
C) sinusitis
D) rhinitis

2. Epistaxis is term for:

A) nose infection
B) nose bleeding
C) ear bleeding
D) ear infection

3. What drugs are given to the client with meniere's disease??

A) antihypertensive
B) diuretic
C) antibiotics
D) vasoconstrictor

4. While communicating with a hearing impaired patient :

A) face the patient when speaking
B) repeat the statement
C) shout so that the patient can hear
D) use a high pitched voice

5. Otoscope is used to visualize :

A) eye
B) ear
C) nose
D) throat

6. What is the meaning of otitis media?

A) inflammation of pharynx
B) inflammation of tonsils
C) inflammation of middle ear
D) inflammation of the sinus cavity

7. Many children with tonsillitis develops ear infection this is because the ear and throat are connected by the:

A) larynx
B) Eustachian tube
C) epiglottis
D) esophagus

8. One of the complications of chronic otitis media is :

A) acute and chronic mastoiditis
B) irreversible hearing loss
C) infection
D) internal injury

9. While instilling Ear Drops, the ear canal of an adult is straightened by pulling the pinna:

A) down and back

B) up and back

C) straight down

D) straight back

10. The inflammation of voice box or vocal card is known as :

A) pharyngitis
B) sinusitis
C) laryngitis
D) parotitis


Thank you For
Your Concern