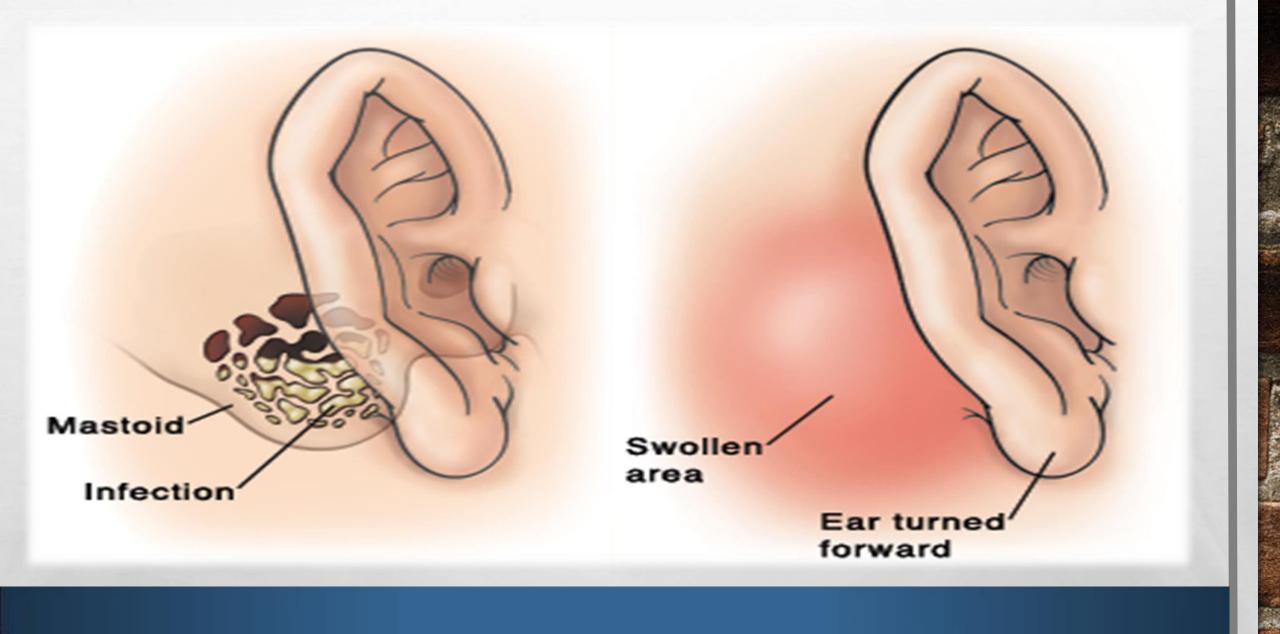
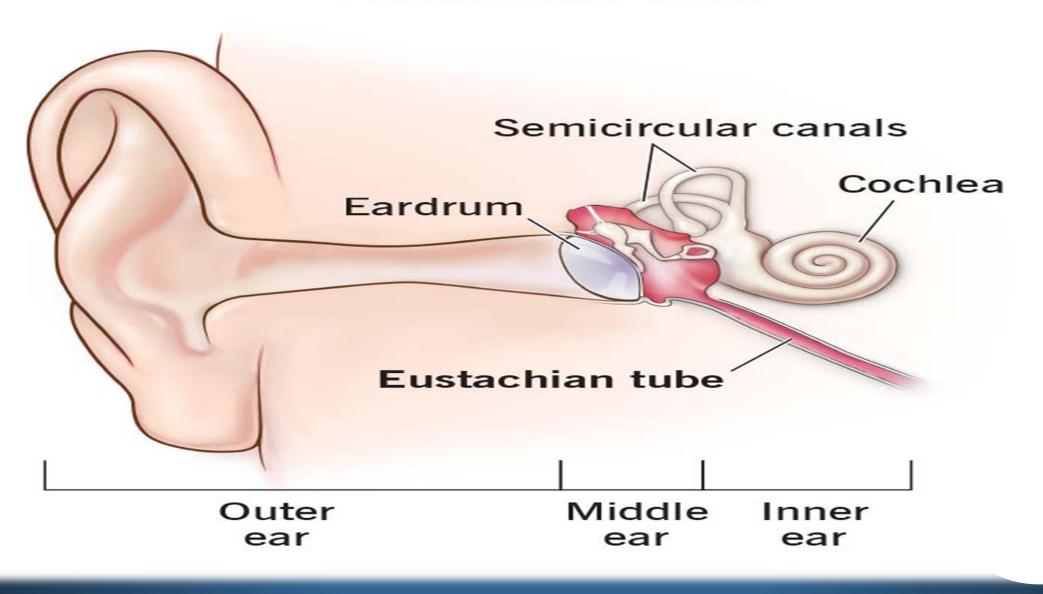


MASTOIDITIS



- ✓ One of the most important structures in <u>inner ear</u> is the mastoid bone.
- ✓ Although it's called a bone, the mastoid doesn't have the typical structure associated with other bones in the human body.
- ✓ It's made of air sacs and resembles a sponge, rather than being solid and rigid like most bones.
- ✓ The mastoid must receive air from other parts of the ear, including the <u>eustachian</u> <u>tube</u>, to function properly.
- ✓ Eustachian tube connects middle ear to the back of throat.

Eustachian Tube



- ✓ If an infection develops in middle ear and blocks eustachian tube, it may subsequently lead to an infection in the mastoid bone.
- ✓ This serious infection is known as mastoid bone infection of the skull, or mastoiditis.
- ✓ Mastoiditis is a serious infection of the mastoid, the hard, prominent bone just behind and under the ear.
- ✓ The condition is rare and can be life threatening without treatment.
- ✓ Mastoiditis is an inflammation of mastoid resulting from an infection of the middle ear.

CAUSES

- ✓ Ear infections, and particularly middle ear infections, are the most common Trusted Source cause of mastoiditis.
- ✓ The bacteria responsible can spread without effective treatment.
- ✓ This may happen, for example, if a person stops the course of treatment before it is complete. It may also happen if the bacteria are resistant to the prescribed antibiotics.
- ✓ Less often, an abnormal growth of skin cells in the middle ear, called a cholesteatoma, can cause a blockage that allows bacteria to multiply and leads to mastoiditis.
- ✓ Cholesteatomas can also cause ear polyps that may result in further obstruction.

- ✓ Streptococcus Pneumoniae
- ✓ Haemophilus Influenzae
- ✓ E. Coli
- ✓ Recurrent Episode Of ASOM
- ✓ Chronic Otitis Media May Cause Chronic Mastoiditis.

SIGN & SYMPTOMS

- ✓ Mastoiditis symptoms may begin after symptoms of an <u>ear</u> <u>infection</u> seem to have resolved. Or, it may seem as though an ear infection has gotten worse.
- ✓intense, throbbing pain in or around the ear
- ✓ pus or other fluids coming from the ear
- ✓a <u>fever</u> or chills

- ✓ swelling behind or under the ear
- ✓ redness behind the ear
- ✓ a bad smell coming from the ear
- ✓ the ear appearing to stick out more or be pushed forward
- ✓ hearing problems, such as ringing in the ears
- ✓ pain that might seem out of proportion

DIAGNOSTIC EVALUATION

- ✓ The mastoid bone is located in inner ear and may not be visible due to the infection. doctor may perform other tests to confirm the diagnosis. These include:
- ✓ a <u>white blood cell count</u> to confirm the presence of an infection
- ✓ a <u>CT scan</u> of your ear and head
- ✓ an MRI scan of your ear and head
- ✓ an X-ray of your skull
- ✓ If the tests confirm a diagnosis of mastoiditis, doctor may also perform a <u>lumbar puncture</u>, or <u>spinal</u> <u>tap</u>. This test will allow doctor to determine if the infection is present in <u>spinal column</u>.

CONT.....

- ✓ History collection
- ✓ Physical examination
- ✓ Routine blood investigations
- ✓ Otoscopic evaluation of the tympanic membrane

MEDICAL MANAGEMENT

- Administer Antipyretic If Patient Have Fever.
- ✓ Antibiotic Like Ampicilline, Penicilline, etc.
- ✓ Analgesic If 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.

NURSING MANAGEMENT

- ✓ During the health history, collect data about the ear problem, including infection, otalgia, otorrhea, hearing loss & vertigo, duration & intensity, causation, prior treatments, health problems, current medications, family history & drug allergies.
- ✓ During the physical assessment, observe the erythema, edema, otorrhea, lesions & odor color of the discharge.
- ✓ Review results of audiogram.

COMPLICATION

- Chronic mastoiditis can lead to the formation of cholesteatoma (ingrowth of the skin of the external layer of the eardrum into the middle ear)
- If mastoiditis is untreated, osteomyelitis may occur.

NURSING DIAGNOSIS

- ✓ Acute pain related to mastoid surgery.
- ✓ Risk for infection related to mastoidectomy, placement of grafts, prostheses.
- ✓ Anxiety related to surgical procedure.
- ✓ Disturbed auditory sensory perception related to ear disorder, surgery.
- ✓ Risk for trauma related to balance difficulties or vertigo.
- ✓ Impaired skin integrity related to surgery.

NURSING INTERVENTIONS

- Reducing anxiety
- Relieving pain
- Preventing infection
- Improving hearing & communication
- Increasing knowledge
- Improving sensory perception
- Promoting home & community based care.

THANK YOU.