

WELCOME
TO
NORTH EAST NURSING COLLEGE



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Mastoiditis

Definition: Mastoiditis is a serious infection in the mastoid process, which is the hard, prominent bone just behind and under the ear. Ear infections that people fail to treat cause most cases of mastoiditis. The condition is rare but can become life-threatening without treatment.



Organisms:

- Streptococcus pneumoniae,
- Streptococcus pyogenes,
- Staphylococcus aureus,
- Haemophilus influenzae,
- Moraxella catarrhalis

Clinical features:

Symptoms:

- intense pain in or around the ear
- pus or other fluids coming out of the ear
- fever or chills
- swelling behind or under the ear
- redness behind the ear
- a bad smell coming from the ear
- an ear that appears to be sticking out or pushed forward hearing problems or ringing in the ears

Signs:

- mood changes
- frequent crying
- hitting the side of the head
- pulling on the ears

Causes:

- Ear infections are the most common cause of mastoiditis.
- When a person does not receive antibiotics for mastoiditis, the bacteria can spread. If people stop taking antibiotics too soon, this can also allow the infection to spread.
- Some people can develop antibiotic-resistant infections that spread even with antibiotic treatment.
- A person may, less commonly, have an abnormal growth of skin cells in the middle ear called a cholesteatoma.
- This skin growth can cause a blockage in the ear that allows bacteria to multiply, causing mastoiditis. Cholesteatomas can also cause ear polyps that may result in further obstruction

Investigations:

1. Examination of ear
2. MRI
3. X-ray
4. Blood test
5. Fluid culture
6. Lumber puncture test

Treatment/prevention:

- Antibiotics can usually treat mastoiditis. In most cases, a person needs intravenous antibiotics, typically requiring hospitalization.
- If the first antibiotic treatment does not work, a doctor may take a culture of the infection to determine the type of bacteria and find a different course of antibiotics.
- In some cases, a doctor may need to perform a mastoidectomy. This operation involves the removal of the portion of the mastoid process that has the infection.
- If there is an abscess, which is a swollen mass of infected fluid, a doctor may need to drain it surgically or with a needle.
- The most effective option for preventing mastoiditis is to treat ear infections promptly.

- It is essential to see a doctor for symptoms of an ear infection that are not improving. This is true even if a person has previously had a successful recovery from an ear infection without needing antibiotics.
- When a doctor prescribes antibiotics for an ear infection, people should take all of the antibiotics even if symptoms disappear. Taking a partial dose of antibiotics makes it easier for the infection to return.
- People should not take older antibiotics that are lying around the house from a previous illness. Taking the appropriate antibiotics for the infection is critical.
- Regular hand-washing and avoiding people who are unwell can help reduce the risk of contracting an ear infection.
- People with a weakened immune system due to HIV or AIDS, diabetes, or certain medications are more vulnerable to serious complications. It is vital to immediately see a doctor for signs of infection in a person with a compromised immune system.

Complications:

- Hearing loss.
- Facial nerve palsy.
- Cranial nerve involvement.
- Osteomyelitis.
- Petrositis.
- Labyrinthitis.

Acute mastoiditis:

Acute infection of mucosal lining of mastoid air cell as an extension of acute otitis media

C/F

Symptoms:

1. Pain behind the ear
2. Temperature
3. Headache
4. Deafness
5. Discharge

Signs:

1. TM is red
2. Perforation may be seen
3. Tenderness over mastoid tip
4. Post articular swelling due to periostitis

Treatment:

1. Antibiotic/ analgesic
2. Surgery – when not improved simple mastoidectomy.

THANK YOU

The End.

