academic publishers
INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE (ISSN: 2692-5206)
Volume 04, Issue 03, 2024
Published Date: - 30-05-2024

FURUNCLE OF THE EXTERNAL AUDITORY CANAL

Shodiyeva Elmira Yusupjonovna
Fergana Institute of Public Health
Assisent of the Department of Dentistry and Otorhinolaryngology

Abstract
Ear furuncle, or limited otitis externa, is a relatively common pathology. It accounts for 15-18% of the total number of otolaryngological diseases. According to statistics, external limited otitis occurs with a frequency of 3-6 cases per 1000 population. In etiology, the most significant factors are skin damage and immunodeficiency, which cause 50-60% of all cases of the disease.

Key words
otolaryngological, diseases,etiology, microbes,furuncle

This is an acute purulent inflammation of the hair follicle, sebaceous gland with limited inflammation of the skin or subcutaneous tissue of the membranous cartilaginous part of the external auditory canal.
Etiology: The disease occurs as a result of the penetration of microbes, most often staphylococci (S. aureus), into the sebaceous or hair follicles during manipulation of the external auditory canal with various objects and fingers (especially in cases of suppuration from the ear). Predisposing factors: – metabolic disorders (in particular, carbohydrate metabolism, diabetes mellitus), poor nutrition; – vitamin deficiencies, generalized furunculosis.

Clinical picture
The patient exhibits the following symptoms of the disease:
a) pain in the ear (leading symptom), which can radiate to the teeth, eyes, neck or spread over the entire half of the head (trigeminal otoalgia), pain intensifies when talking, chewing, at night;
b) sharp pain occurs when pressing on the tragus or when pulling the auricle;
c) infiltration of the skin of the external auditory canal, which can spread to the soft tissues surrounding the auricle and to the mastoid process;
d) an increase in regional parotid lymph nodes, as well as their density and pain on palpation;
e) inflammation of the parotid gland (when the boil is located on the anterior or lower wall of the ear canal in the area of projection of the Santorini fissures);
f) increased body temperature and chills (symptoms of intoxication). Otoscopy reveals a rounded elevation in the outer ear canal, covered with hyperemic skin, narrowing the lumen. The furuncle of the external ear goes through 2 stages: infiltration and abscessation , when it can spontaneously open. At this moment, the patient notes the disappearance of pain, and his health gradually improves. The average duration of the disease is 7 days, but relapses are possible. The diagnosis is based on medical history, complaints, examination results (pain when pressing on the tragus , chewing, etc.). If the boil is located at the entrance

to the ear canal, it can be seen without the help of instruments; in other cases, the examination is carried out carefully using a narrow ear funnel. In the infiltration stage (the first two to three days of the disease), the skin of the ear canal is thickened, the symptoms increase, and in the abscessation stage , you can notice a purulent head visible through the skin, and after spontaneous emptying, a crater-shaped depression at the top of the cone-shaped eminence, from which pus is released. A differential diagnosis of a boil of the external auditory canal with mastoiditis is carried out, in which pain and swelling in the area of the mastoid process is detected (with a boil of the external ear - in the area of the postauricular fold), thickening, hyperemia and, possibly, protrusion of the eardrum (with a boil of the external ear the eardrum is not changed), overhang of the posterior -superior wall of the external auditory canal in the bony part. Mastoiditis is preceded by acute otitis media accompanied by a runny nose, and there is a pronounced decrease in hearing (with a boil of the external ear, hearing is usually not changed, the disease is provoked by manipulations in the ear canal).

Treatment

In the first days of the disease (infiltration stage), conservative therapy is carried out. Antibiotics are prescribed systemically (orally or intramuscularly) in severe cases with symptoms of severe intoxication: oxacillin, protected aminopenicillins (amoxicillin with clavulanic acid), cephalosporins, macrolides in age-specific dosages. Antipyretic and painkillers (paracetamol, efferalgan , ibuprofen) are prescribed symptomatically for severe pain and an increase in body temperature above 38°C in standard doses.

Local treatment: at the stage of infiltration, the doctor decides whether this process will abscess (then it is necessary to accelerate its “maturation”, helping to soften the skin over the intended opening site through the use of ointments) or whether the infiltrate will be stopped conservatively without suppuration (then use tanning antiseptics and semi-alcohol compresses for the fastest “resorption” of the infiltrate). To make such a decision, the duration of the process, the severity of clinical symptoms, and predisposing factors are assessed. Mupirocin in the form of 2% skin ointment, levomekol , as well as Vishnevsky or naftalan ointment are used as skin softening and antibacterial substances . To thicken the skin over the infiltrate (for the purpose of its resorption), use boric alcohol + glycerol (1 : 1), dimexide 1: 4, alcohol 40% on turunda in the external auditory canal for 30-40 minutes. If local swelling of the skin of the ear canal is mild, you can treat the area of the boil with a solution of brilliant green once a day. Previously, for recurrent boils, autohemotherapy was used (intramuscular injections of blood taken from the patient’s vein in an amount of 4 to 10 ml, with an interval of 48 hours). In some cases, staphylococcal toxoid is prescribed. Nowadays they use ultraviolet irradiation of blood. Physiotherapy is combined with drug therapy (in the absence of increased body temperature and abscess formation): UV irradiation, UHF, microwave on ear area No. 3-5.

Surgical treatment: opening of the boil is performed when :

a) abscess formation (maturation) of the boil (on the 3-4th day of the disease);

b) increased pain and symptoms of intoxication;

c) the occurrence of parotid lymphadenitis.

An incision is made under short-term anesthesia in children or under local anesthesia (a local anesthetic is injected intradermally over the intended incision site) in the place of the greatest protrusion of the skin in the ear canal, the purulent core is removed (by suction, rarely rinsing), the abscess cavity is drained with a rubber strip, inserting it carefully into abscess cavity with a probe), a turunda with a hypertonic solution of 10% sodium chloride or 25% magnesium sulfate is introduced into the ear canal , which is changed after 4-6 hours. Limiting carbohydrate intake and maintaining skin hygiene are definitely recommended. From the examination data, attention is paid to the level of sugar in the blood, and the presence of purulent chronic otitis media, which can provoke the appearance of a boil of the external ear, is excluded.

Evaluation of treatment effectiveness

The use of antibacterial drugs and local therapy usually leads to a rapid improvement in the well-being of patients and recovery.

References:

1. Palchun V. T., Magomedov M. M., Luchikhin L. A. Otorhinolaryngology: textbook. – 2nd ed., rev . and additional – M .: GEOTAR-Media, 2011. – 656 p. : ill. Additional 1. Kozlov M.Ya. Acute otitis in children and their complications. – L.: Medicine, 1986. – 232 p., ill.

2. Shevrygin B.V., Mchedlidze G.P. Handbook of otorhinolaryngology. – M.: TRIADA – X, 1998. – 448 p.
3. Bogomilsky M.R., Chistyakova V.R. Pediatric otorhinolaryngology. 2nd ed. reworked and additional – M.: GEOTAR-media, 2007. – 576 p.
4. Otorhinolaryngology: national guide / ed. V.T. Palchuna . – M.: GEOTAR-Media, 2008. – 960 p. – (Series “National Guidelines”).
5. Bogomilsky M.R., Minasyan V.S., Rakhmanova I.V. A practical guide to the diagnosis, treatment and prevention of ear, nose and throat diseases in newborns, infants and young children: a practical guide for primary care physicians. – M.: Publishing house RGSU: GBOU VPO RNIMU im. N.I. Pirogova, 2012. – 168 p. Electronic databases 1. http://otorhinolaryngology.eurodoctor.ru 2. http://meduniver.com