CONDITION

Candida auris infection

Learn how Candida auris spreads in healthcare settings, who is at risk, how infection and colonization are diagnosed, and what treatment and follow-up may involve.

WHAT IT IS
Healthcare-associated yeast infection

BODY SYSTEM
Blood, skin and other organs

MAIN SYMPTOMS
Fever, chills, low blood pressure, confusion

WHAT CAUSES IT
Fungal yeast infection

HOW IT IS DIAGNOSED
Culture with specialized or molecular identification

MAIN TREATMENT
Antifungal medicines and source control

CAN IT BE CURED?
Sometimes - infection can return after treatment

IS IT AN EMERGENCY?
Sometimes - difficulty breathing, fainting or new confusion

LONG-TERM OUTLOOK
Colonization may persist and invasive infection can be severe

Overview

Candida auris , often shortened to C. auris , is a type of yeast. Yeasts are fungi that can live on the body or in the environment. Unlike more common Candida species, C. auris mainly spreads in healthcare settings and can remain on skin and surfaces for long periods.

A person can carry C. auris on the skin without feeling sick. This is called colonization . Colonization is not the same as an infection. An infection occurs when the yeast enters the bloodstream, a wound, or another body site and causes illness.

C. auris matters for several reasons. It may spread between patients in hospitals and long-term care facilities. It can also be difficult for some laboratories to identify. In addition, many strains resist at least one class of antifungal medicine, and some resist several classes.

Serious infections occur mainly in people who are already very ill or need complex medical care. Healthy people without medical devices generally have a low risk of developing invasive C. auris infection.

Healthcare facilities use special infection-control steps when C. auris is found. These measures are intended to protect the affected person and reduce spread to other patients.

Symptoms

Colonization does not cause symptoms. A person may not know they carry C. auris unless testing is done for infection-control purposes.

Symptoms of infection depend on where the yeast is growing. A bloodstream infection may cause fever and chills that continue despite treatment for a suspected bacterial infection. It may also cause low blood pressure, weakness, confusion, or other signs of a severe whole-body response to infection.

Other possible infections include wound, bone, abdominal, and ear infections. Symptoms may include pain, redness, swelling, drainage, poor wound healing, or tenderness in the affected area. These symptoms are not specific to C. auris . Many bacterial, fungal, and noninfectious conditions can look similar.

Finding C. auris in urine, the respiratory tract, or on the skin does not always mean it is causing disease. Clinicians consider the person's symptoms, medical condition, examination, and test results before deciding whether treatment is appropriate.

Contact a healthcare professional promptly if you have a fever, chills, worsening wound changes, or new weakness while you have a central line, breathing tube, feeding tube, urinary catheter, or recent history of prolonged healthcare treatment.

Seek emergency care for symptoms that could suggest a severe infection, such as difficulty breathing, new confusion, fainting, severe drowsiness, or signs of very low blood pressure. These symptoms have many possible causes and require urgent assessment.

Causes and risk factors

C. auris can spread through direct contact with a colonized or infected person. It can also spread through contaminated medical equipment, bed rails, furniture, and other surfaces. The yeast can survive in the healthcare environment, so careful cleaning and disinfection are important.

It is not usually considered a common community infection. Most transmission has been linked to hospitals, long-term acute care hospitals, skilled nursing facilities, and other settings that care for people with substantial medical needs.

People at higher risk often have one or more of the following:

These factors do not mean that a person will develop an infection. They increase opportunities for the yeast to enter the body or spread in a healthcare environment.

Unlike some other Candida infections, C. auris is often acquired from another person or a contaminated healthcare environment. Researchers continue to study why it emerged in different parts of the world and how it develops resistance to antifungal medicines.

- A long or repeated stay in a healthcare facility
- A central intravenous line, urinary catheter, breathing tube, feeding tube, or another device entering the body
- Mechanical ventilation, which means using a machine to assist breathing
- Recent surgery or open wounds
- Treatment with broad-spectrum antibiotics or antifungal medicines
- A weakened immune system or serious underlying illness
- Care in a facility where C. auris transmission has occurred

Diagnosis

Diagnosis depends on whether clinicians are looking for active infection or colonization.

When infection is suspected, a clinician may collect blood, wound drainage, tissue, or another sample from the affected site. The laboratory attempts to grow and identify the organism. Blood cultures are especially important when a bloodstream infection is possible.

C. auris can be mistaken for other yeasts by older or less specialized laboratory systems. A laboratory may use updated identification equipment, such as mass spectrometry, or a molecular test that detects fungal genetic material. A suspected isolate may be sent to a public health or reference laboratory for confirmation.

Once C. auris is identified, the laboratory may perform antifungal like fluconazole or terbinafine susceptibility testing . This measures how well different antifungal medicines work against the isolate in the laboratory. The result helps clinicians choose or adjust treatment, although laboratory findings must be interpreted along with the person's response to care.

Screening for colonization uses swabs from the skin, commonly the armpits and groin.

Screening is usually arranged by healthcare or public health teams when a patient has been exposed, received care in a facility with transmission, or meets other local screening criteria. A positive screening swab means the person is carrying the yeast; it does not by itself show invasive infection.

Clinicians may also order imaging, repeat cultures, or tests of organ function. These help identify the source of infection and check for complications.

Treatment and management

Antifungal treatment is used for clinical infection, not colonization alone. Treating colonization has not been shown to remove C. auris reliably and could add medication risks or encourage further resistance.

For most adults and children at least 2 months old, the Centers for Disease Control and Prevention recommends an echinocandin as initial treatment. Echinocandins are antifungal medicines given into a vein. For infants younger than 2 months, treatment choices differ and are guided by specialists. The exact medicine depends on age, infection site, organ function, susceptibility results, and response to treatment.

Some C. auris isolates are resistant to echinocandins. If a person is not improving or testing shows resistance, clinicians may use a medicine from another antifungal class. Infectious disease consultation and public health laboratory support can help guide treatment of resistant infections.

Treatment commonly includes more than medicine. Clinicians may need to remove or replace an infected central line, drain an abscess, clean damaged tissue from a wound, or address another source. This is called source control .

For bloodstream infection, follow-up blood cultures may be collected to confirm that the yeast is no longer present in the blood. The duration of therapy is based on culture results, symptoms, the infection site, and whether complications are present. Antifungal medicines may require blood tests to monitor the liver, kidneys, blood counts, or electrolytes.

Infection-control measures are also part of management. Depending on the setting, these may include a private room when available, gloves and gowns for staff, dedicated equipment, careful hand hygiene, and cleaning with a disinfectant effective against C. auris . Alcohol-based hand sanitizer is generally effective for routine hand hygiene unless hands are visibly dirty.

Patients and visitors should follow the facility's instructions. Family members who are healthy usually have a low risk of infection, but everyone should clean their hands before and after contact with wounds, medical devices, or the patient's immediate environment.

Complications

An invasive C. auris infection can spread through the bloodstream and affect organs. It may contribute to sepsis, an extreme body response to infection that can damage organs. Possible complications include low blood pressure, kidney or liver problems, breathing difficulties, and infection involving the heart, bones, eyes, or other sites.

People who develop invasive infection are often already critically ill. This can make it difficult to separate the effects of C. auris from those of other serious medical conditions.

Antifungal resistance may delay effective treatment or limit medicine choices. Infection can also return if an infected device remains in place, the source cannot be fully controlled, or the yeast has spread to a deeper body site.

Colonization can persist for months or longer, even after an infection has been treated. A person may continue to carry the yeast on the skin and could contribute to healthcare-associated spread. Colonization itself usually does not cause physical harm, but it affects infection-control planning during later healthcare visits.

Follow up

Routine follow-up after an invasive infection may include clinical visits, repeat cultures, laboratory monitoring, and review of any lines, drains, wounds, or other possible sources. People with deeper infections may need imaging or follow-up with infectious disease, surgical, wound-care, or other specialists.

Take antifungal medicine for the full period directed by the treating team. Do not stop or change treatment based only on feeling better. Contact the prescribing team if side effects, missed doses, or barriers to receiving an intravenous medicine occur.

Tell future hospitals, nursing facilities, dialysis centers, home health agencies, and other healthcare providers about a previous positive C. auris result. This allows them to use suitable room placement, cleaning, and protective measures. It does not mean needed medical care should be delayed.

Routine repeat screening to prove that colonization has cleared is generally not recommended by the CDC. Swab results can vary over time, and a negative test may not mean colonization is permanently gone. Infection-prevention or public health teams may recommend testing in specific circumstances.

During routine follow-up, ask whom to contact for new fever, wound changes, device problems, or possible medication side effects. Seek prompt medical advice if these develop.

Emergency symptoms such as severe trouble breathing, fainting, or new confusion require immediate care.

Sources

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