

الإدارة العامة
لمكافحة عدوى المنشآت الصحية

General Directorate of Infection Prevention
&
Control of Healthcare Facilities

(GDIPC)

Candida Auris Screening Guidance

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Introduction:

Candida auris (C.auris) is an emerging multidrug-resistant fungus that can lead to invasive infections with high morbidity, mortality, and has been transmitted in healthcare settings. Patients could be asymptotically colonized with C. auris. Patients with C. auris colonization can spread this yeast to other patients, and colonized patients can develop invasive as well as superficial infections. Accordingly, identifying patients colonized with C. auris is a main step in containing the spread of C. auris among healthcare facilities. The instructions below will provide guidance of screening of Candida auris.

Definition:

- ▶ Colonization means the presence and growth of a microorganism on a body with growth and multiplication but without tissue invasion or cellular injury or symptoms.
- ▶ Screening is a process to identify patients at risk of being colonized with antimicrobial-resistant organisms

Comments:

- ▶ All patients with risk factors admitted to the critical care units should be screened to rule out Candida auris colonization based on specific risk factors that are mentioned in the internal healthcare facility policy' and according to the national & international guidelines.
- ▶ Screening patients to identify C. auris colonization is an important part of infection prevention and control.
- ▶ Identify all sources of Candida auris.
- ▶ Colonized patients are at increased risk of developing infection.
- ▶ Prevent the transmission of Candida auris to, from, and between healthcare workers, patients, and the environment.
- ▶ Standard precautions must be observed for all patient care.

Procedure:

Initiate the following preventive measures for all patients who are at risk of C. Auris colonization.

A. Screen all patients who are:

Admitted to the critical care units and with specific risk factors to rule out Candida auris colonization:

- ▶ Patients with an indwelling medical device, such as a central venous catheter, breathing aid tubes, urinary catheter, biliary catheter, or wound drain.
- ▶ Any patient transferred from another healthcare facility OR long-term facility.
- ▶ Roommates were exposed to C. auris-positive patients for more than 48 hours.
- ▶ Individuals with current multidrug-resistant gram-negative bacteria who received healthcare outside of the Kingdom of Saudi Arabia (KSA) within the last 12 months.
- ▶ Patients transferred from a unit with current transmission within the healthcare facility of C. auris or recent transmission within the last 30 days.
- ▶ Carbapenem-resistant Enterobacterales (CRE) positive patient (infected & colonized).
- ▶ Immunocompromised patient.

Others:

- ▶ Screening is recommended in departments that are experiencing outbreaks or having **an increase in the number of ongoing cases and/or colonization.**

NB: In all cases, in the four weeks prior to diagnosis in the index patient, the healthcare facility should look back to see if there has been an increase in detection of Candida in the same intensive care setting or ward as this may represent unrecognized transmission.

B. Screening of healthcare workers (HCWs) and the environment :

- ▶ Routine screening of healthcare workers and the environment are not recommended unless epidemiological evidence links to transmission or indicated by the infection prevention & control (IPC) team.

C. Screening sites:

- ▶ Screen for *C. auris* colonization using a composite swab of the patient's bilateral axilla and groin. Recent evidence suggest that these sites are the most common and consistent sites of colonization.
- ▶ Also consider screening the following sites (if clinically indicated or previously positive): Nares, mouth, external ear canals, urine (especially if there is a urinary catheter in-situ), Cannula entry sites, endotracheal secretions drain fluid (abdominal/pelvic /mediastinal), wounds, and rectum, these sites are usually less sensitive for colonization screening.

D. Steps for sample collection:

- ▶ Open the swab package by grasping the plastic at the opposite end from the soft tip. Leave the swab tip enclosed in the package to prevent contamination.
- ▶ Carefully remove the tube from its packaging.
- ▶ Pull the swab from its package, being careful not to touch the soft tip. Firmly rub the soft end of the collection swab as described in the next step. Swab both the axilla and groin with the same swab as described below.
- ▶ Rub all sides of the swab tip over the left axilla skin surface and then the right, targeting the crease in the skin where the arm meets the body (i.e., swab both armpits, swiping back and forth 5 times per armpit).

- ▶ With the same swab used on the axilla, rub both sides of the swab tip over the left groin skin surface, targeting the inguinal crease in the skin where the leg meets the pelvic region and repeat with the right side (i.e., swab the skin of both hip creases, swiping back and forth 5 times per hip crease).
- ▶ Remove the cap from the swab collection tube; then place the soft end of the collection swab into the tube. Be careful to keep the cap from touching any materials that may contaminate your sample.
- ▶ Snap off the end of the swab at the marked line by bending the plastic handle against the edge of the transport media container.
- ▶ Screw on the tube cap.
- ▶ Write specimen information on the tube label or apply the patient identification label.
- ▶ Send it to the laboratory department.

E. Notification of the C. auris:

- ▶ The hospital should have a well-designed notification system between the IPC, laboratory, and all departments for any critical values (i.e., MDROs, positive cultures.), and all these values must be monitored regularly.
- ▶ The microbiology lab will notify the treated physician, the concerned ward, and the Infection Prevention and Control (IPC) Department of the C. auris.
- ▶ Colonized patients with C.auris must be flagged in the electronic medical file. (For further information refer to the Healthcare-Associated Infections (HAIs) Outbreak Management Manual, 2023)

F. Management of *C. auris* colonized patients:

- ▶ Practice strict hand hygiene measures.
- ▶ Apply contact-based precautions in addition to standard precautions.
- ▶ Place the patient in a single-patient room whenever possible.
- ▶ Place a contact isolation sign on the outside of the isolation room door.
- ▶ When single rooms are not available, healthcare facilities can cohort confirmed colonized patients with *C. auris* together in the same room based on infection prevention & control recommendations.
- ▶ Dedicate healthcare personnel (e.g., nurses, nursing assistants) who provide regular care to these patients during a shift whenever possible.
- ▶ Single use non-critical items such as blood pressure cuffs and stethoscopes should be used.
- ▶ If single-use items are not available, reusable equipment should be properly cleaned and disinfected with the recommended disinfectants post providing patient care, and shared mobile equipment (e.g., glucometers) should be focused on.
- ▶ Visitors to the infected or colonized *C.auris* patients should be avoided as possible.
- ▶ limit patient transfer and if mandatory, infection prevention & control measures should be strictly applied.
- ▶ Notify receiving departments/wards (e.g., Radiology, Endoscopy, Clinics, OR) of the patient's isolation status when the patient must be transported for treatment/tests.
- ▶ Transport patients by applying isolation precautions.

- ▶ Invasive/surgical procedures, strict adherence to care bundles including skin decolonization processes is critical to reduce the risk of invasive *C. auris* infection. Placing the *C. auris* colonized patient last on the list is recommended where feasible to enable thorough cleaning to be applied after the episode of care.
- ▶ Store the minimum number of supplies in the patient's room.
- ▶ Use an isolation cart for extra supplies (kept outside the room).
- ▶ Flag "the patient's record to institute recommended infection control measures in case of re-admission.
- ▶ Ensure strict adherence to intravascular device guidelines and bundles.
- ▶ Ensure that all staff understand and comply with the isolation precautions and hand hygiene protocol.
- ▶ Ensure concurrent and terminal cleaning of the isolation room and equipment as per housekeeping procedure.
- ▶ Handle/discard contaminated items as per standard precautions.
- ▶ Request Infectious Diseases consultation as needed.
- ▶ Discharge the patient from the hospital once his/her medical condition allows and upon the decision of the treating physician.
- ▶ If the *C. auris* colonized or infected patient is being transferred to another hospital or healthcare facility, the transferring hospital is obliged to inform the receiving hospital of the details of the *C. auris* to ensure proper isolation.

- ▶ Emergency medical services (EMS) and other healthcare providers involved in transferring such a patient need to be made aware of the status of the patient and advise on proper personal protective equipment's (PPE), as well as, disinfection of the ambulance, as deemed necessary.
- ▶ Implement antimicrobial stewardship for broad-spectrum antibacterial and antifungal agents to limit the emergence of *C. auris*, other MDRO, and multidrug- or pan-resistant *C. auris*.
- ▶ Medical waste coming from *C. auris*-colonized patients should be treated based on the approved national medical waste regulations.
- ▶ Routine (at least daily or when required), and terminal cleaning and disinfection of patients' rooms and other areas where patients receive care (e.g., radiology, physical therapy) should be implemented applying an appropriate disinfectant that is effective against *C.*
- ▶ Applying MOH-approved and appropriate disinfectant that is effective against *C. auris*. disinfectants (Sodium hypochlorite 1000 ppm, Hydrogen peroxide, etc.) as high-level disinfectants should be used with consideration of the manufacturer's instructions.
- ▶ Use the new and evolving disinfection technologies, like ultraviolet light and hydrogen peroxide vapor/mist decontamination machines for terminal cleaning, and they should be used only in post-standard cleaning

G. Decolonization:

- ▶ C. auris decolonization is not recommended in evidence. However, regular routine body washing, skin preparation for invasive procedures, and care bundles by using approved skin disinfectants should be implemented for all critical care patients.

H. Rescreening C. auris -colonized patients:

- ▶ Rescreening of C. auris - colonized patients is not recommended. However, consult with the infectious disease physician and infection control department for further recommendations.

I. Clearance/discontinuation of contact isolation:

- ▶ Patients in healthcare facilities often remain colonized with C. auris for a long period of time lasting for several months even after an acute infection (if present) has been treated and resolved. Continue contact isolation precautions for the whole duration of all inpatient healthcare stays, including those in long-term healthcare settings.

References

- ▶ **Candida auris: a review of recent literature**, United Kingdom Health Security Agency (2023). Retrieved from <https://www.gov.uk/government/consultations/candida-auris-update-to-management-guidance/candida-auris-a-review-of-recent-literature#internationally-published-guidance-and-recommendations>
- ▶ **Guidance for the laboratory investigation, management and infection prevention and control for cases of Candida auris v2.0**, Public Health England (2017). Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/637685/Updated_Candida_auris_Guidance_v2.pdf
- ▶ **Screening for Candida auris Colonization**, Center for Disease Control & Prevention (2020). Retrieved from <https://www.cdc.gov/fungal/candida-auris/c-auris-screening.html>
- ▶ **Candida auris in healthcare settings – Europe**, European Centre for Disease Prevention and Control (2018). Retrieved from <https://www.ecdc.europa.eu/sites/default/files/documents/RRA-Candida-auris-European-Union-countries.pdf>
- ▶ **Candida auris**, Australia Department of Health (2019). Retrieved from <https://www.health.vic.gov.au/infectious-diseases/victorian-guideline-on-candida-auris-for-health-services>