

The Role of Cleaning and Disinfection in the Prevention of Ongoing *Candida auris* Transmission in a Surgical Intensive Care Unit



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Disclosures

Nothing to Disclose.

Abstract

Candida auris (*C. auris*) is an emerging multidrug-resistant fungal pathogen that spreads easily between hospitalized patients. Research shows that *C. auris* can contaminate the environment and survive on hospital surfaces for over two weeks. On November 20, 2022, a hospital acquired *C. auris* infection was identified.

Objectives

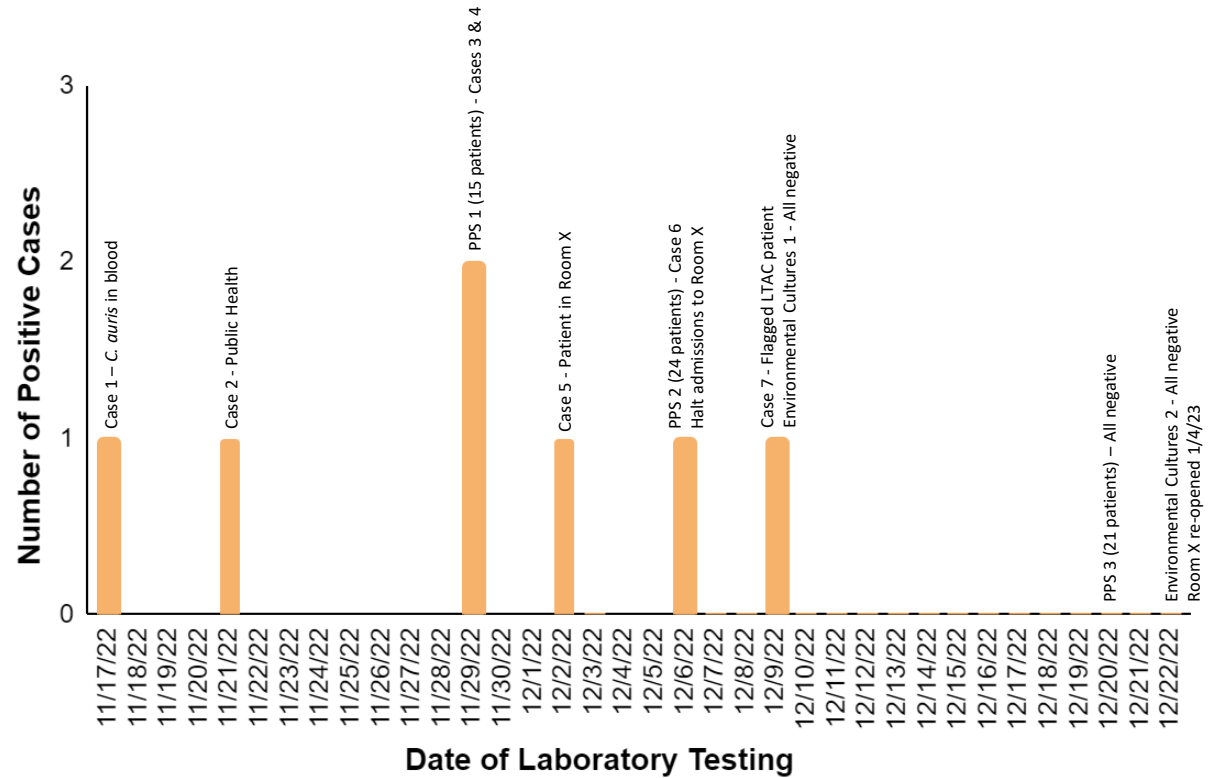
Limit spread and curb transmission of *C. auris* in a surgical intensive care unit (SICU).

Study Design

Three rounds of point prevalence screening (PPS) were performed on potentially exposed patients in the SICU. The medical record was flagged for discharged patients that had contact with a *C. auris* case or potentially contaminated room to alert staff to screen upon readmission. In partnership with public health, an infection prevention risk assessment of the SICU was performed. A line list displaying room locations and risk factors was created.

Results

PPS conducted from November 29, 2022 to December 20, 2022 revealed an additional 3 positive patients out of 60 screened. Three other cases were identified via Public Health, flagged charts, or link to SICU Room X. In total, 6 additional colonized patients were implicated in the outbreak investigation with 5 consecutive patients linked to one SICU room. Admissions to the room were halted while a protocol was established which emphasized removal of all disposable items, disinfection using an Environmental Protection Agency List P disinfectant, use of an electrostatic sprayer, and changing cubicle curtains upon discharge.



Conclusion

Further transmission was avoided after educating all staff on proper cleaning and disinfection methods to prevent environmental contamination and spread of *C. auris*.

Education, Infection Sign and Door Flag

Candida auris Guidelines

Candida auris (C. auris) can cause severe infections such as bloodstream and other invasive diseases, particularly in hospital and nursing home patients with multiple comorbidities. Over 1 in 3 patients die within a month of being diagnosed with an invasive C. auris disease. C. auris is often multidrug-resistant and antibiotic resistance commonly used to treat other Candida infections usually don't work. It is becoming more common that C. auris isolates are resistant to all three major classes of antifungal medications. C. auris was first discovered in 2009. However, over the last decade, the numbers have drastically increased and it is now reported in dozens of countries. Although there is a rise in the number of patients diagnosed with active disease with C. auris, whether patients have active disease or colonization, they are handled using the same infection prevention measures.

C. auris guidelines MUST be strictly adhered to during a patient's entire admission:

- Place patients in Contact Precautions and enter room on all screens.
- Place Contact Precautions sign and orange triangle flag on patient's door (see examples below).
- Contact Infection Prevention (CIP) for any newly diagnosed C. auris patient or patient admitted with C. auris history (no matter how remote). Use ProtectSigns if after hours.
- Remove all medications below which collect preservatives (open & generic) upon entering patient's room.
- If going for a procedure or imaging, ensure all instruments are aware of available precautions.
- Limit use of shared equipment. If unavoidable, ensure all equipment after the room is thoroughly disinfected with peracetic acid or bleach. Allow equipment to remain wet for entire dwell time.
- More essential items only to patients' room. Avoid having equipment supplies because they will need to be discarded upon discharge.

When the patient is discharged or transferred to a new room:

- Consistent use of disinfection protocols when entering room to ensure report.
- Having staff remove all disposable items from the room including package supplies that may be stored in carts, drawers, shelves, or over-the-sink. Supplies must be discarded even if in a paper bin.
- Discard gown boxes and disinfectant canisters.
- Discard emptying, quality control, or other supplies that can be disposed of and then restock.
- After removal of all supplies, notify Therapeutics to perform a terminal clean using Clorox B and the electrostatic sprayer. Therapeutics will remove and replace the cubicle curtain.

Contact Precautions

Written report to nurse before entering

Head sign

Room sign

Personal protective equipment

Room disinfection

Room cleanup

Room exit equipment

Standard of Care Infection Prevention and Control Services
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See Guidelines



References

Centers for Disease Control and Prevention. *Candida auris*. <https://www.cdc.gov/fungal/candida-auris/index.html>. September 26, 2023

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