Successful implementation of the interim CDC precautions during the care of a patient with *Candida auris* colonization in an inpatient rehabilitation facility and an intensive care unit

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**Case description and clinical course**

A 56 year-old-woman with a history of intra-abdominal *Candida auris* infection in India was admitted for neurological rehabilitation to our inpatient rehabilitation facility. She had been treated with multiple antibiotics as well as 21 days of anidulafungin prior to transfer to our facility. The patient’s initial urine and skin cultures grew Candida species which was later identified as *Candida auris* by MALDI TOF with the MICs shown below. Ten days after her arrival she was transferred to the intensive care unit of our acute care hospital for severe sepsis and was started on broad spectrum antibiotics and micafungin. After thirty days in the ICU, she developed a worsening hemorrhagic stroke with uncal herniation, and care was withdrawn.

**Table I. Minimum Inhibitory Concentrations of antifungal medications tested for Candida auris isolate from our patient**

<table>
<thead>
<tr>
<th>Medication</th>
<th>MIC&lt;sub&gt;50&lt;/sub&gt;</th>
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<tbody>
<tr>
<td>Fluconazole</td>
<td>&gt;256</td>
</tr>
<tr>
<td>Micafungin</td>
<td>0.5</td>
</tr>
<tr>
<td>Amphotericin</td>
<td>2</td>
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</tbody>
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**Infection precautions and outcome**

While at the rehabilitation center and the acute care hospital ICU, our patient was housed in a private room with an anteroom. Equipment used for therapy, respiratory care, medications, and nursing supplies were dedicated to our patient and discarded after discharge. A limited number of therapists, nurses, and physicians were assigned to her case and strict contact precautions were followed. Daily cleaning was carried out with 10% bleach. After discharge, rooms and equipment were disinfected with hydrogen peroxide vapor twice. The ICU room was cultured after disinfection and all cultures were negative. For surveillance purposes, the patient was assessed for skin colonization several times during her hospitalization. All Candida isolated from patients in the same unit during her stay and up to a month after discharge were identified to the species level to rule out *Candida auris*. While the patient remained colonized during her stay, there were no other cases of *Candida auris* infection or colonization at either location.

**Background and Epidemiology**

*Candida auris* was first described in 2009 after it was isolated from the ear of a patient in Japan. It has caused increasing global concern since that time because of its multi-drug resistance, its virulence, and its ability to spread from patient to patient, which sets it apart from other candidal infections. Prolonged time in a healthcare facility, presence of a central line, recent surgery, diabetes, and prolonged use of antibiotics or antifungals are risk factors for infection with *C. auris*. It is often misidentified by conventional laboratory methods, adding an extra challenge to infection control.

**Conclusions**

*Candida auris* is an emerging nosocomial pathogen that is generally resistant to azoles and has variable resistance to amphotericin B and echinocandins. Our case shows that it is possible to prevent the spread of *Candida auris* both in rehabilitation and acute care units when the CDC interim recommendations are followed.

**References**


**Figure 1. A strain of Candida auris cultured in a petri dish at CDC.**