Evaluation of antifungal efficacy in the treatment of *Candida auris* bloodstream infections

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BACKGROUND

- *C. auris* infections continue to be a growing issue throughout the United States
- In the Valley Health System (VHS) alone, there has been a rise of *C. auris* cases, particularly bloodstream infections (BSIs)
- Although echinocandins are the drugs of choice for *C. auris* BSIs, other antifungals have been used to treat persistent infection and resistance rates have been increasing
- Limited studies are available for the treatment, patterns of resistance, and sources of this candidemia
- The purpose of this study is to evaluate antifungal use in *C. auris* BSIs and identify risk factors for infection

STUDY OBJECTIVES

- **Primary outcome:** all-cause mortality
- **Secondary outcomes:**
  - Discharge deposition
  - Readmission for fungal infection
  - Hospital length of stay
  - Concomitant bacterial or viral infection

METHODS

- Multicentered, retrospective, descriptive study
- Patients will be identified through a microbiology report of all positive blood cultures for C. auris

- **Inclusion criteria:**
  - Age ≥ 18 years
  - Admitted to a VHS hospital
  - At least one confirmed positive blood culture with C. auris
  - Active antifungal treatment

- **Exclusion criteria:**
  - Antifungal treatment for ≤ 48 hours
  - Survived ≤ 48 hours from a positive blood culture
  - Presence of bacterial BSI prior to antifungal treatment

- **The following data will be collected:**
  - Patient demographics
    - Age
    - Gender
    - Ethnicity
  - Comorbidities
    - Immunosuppression
    - Dialysis/renal replacement therapy
    - Intravenous drug use
  - Culture and susceptibility data
  - Antimicrobial therapy
    - Dose, frequency, duration of therapy
    - Addition or modification of antimicrobials
  - Pitt bacteremia score
  - Documented side effects

DATA ANALYSIS

- Descriptive statistics will be utilized to characterize patient demographics and identify common risk factors of those infected with a *C. auris* BSI
- Descriptive statistics will also be utilized to analyze patient outcomes on antifungal therapy

ANTICIPATED FINDINGS

- The research results will provide data and patient outcomes on a pathogen that is increasingly becoming drug resistant

REFERENCES

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DISCLOSURE

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