



RES-143

Trends in Detection of *Candidozyma auris* in Urine Cultures in Korea from 2021 to 2024 Using Referral Laboratory Data

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Background

- The detection frequency of *Candidozyma (Candida) auris* has been reported to be on the rise in world wide.
- C. auris* is recognized as a major target for infection control due to its high fatality rate when cultured from specimens of immunocompromised patients.
- Particularly, *C. auris* cultured from urine can progress to invasive infections and cause transmission within healthcare facilities.
- However, epidemiological data to understand the status of *C. auris* in Korea are lacking.
- This study investigated the detection patterns of *C. auris* using urine culture data referred to a reference laboratory.

Method

- Urine culture data from 492,417 urine samples from 2021 to 2024.
 - 361,353 patients (32.0% male, 68.0% female), pediatric and adult patients
 - 2,667 medical institutions across all regions of Republic of Korea
 - Submitted to the Seegene Medical Foundation
- Urine culture
 - Quantitatively cultured on blood agar and MacConkey agar at 35°C for 24 hours, Colonies exceeding 10⁴ CFU/mL
 - Identified using MALDI TOF-MS (Bruker Daltonics GmbH, Bremen, Germany)

Result

- The number of institutions where *C. auris* was detected increased from 1 in 2021, to 1 in 2022, 3 in 2023, and 6 in 2024.
- Number of newly identified patients with cultured *C. auris* increased annually: 2, 4, 7, and 11 in each successive year (Figure 1 and table 1).
- The patients with *C.auris* in their urin
 - Median age: 79 years (Interquartile range 67–84.5)
 - Gender : 16 males (66.7%) and 8 females (33.3%) (p<0.001, chi-square test).
- The annual number of urine samples were 2, 12, 56 and 21 (Figure 2).
- The institution with the highest number of detected patients accounted for 15 individuals, representing 62.5% of the total cases (Figure 3).

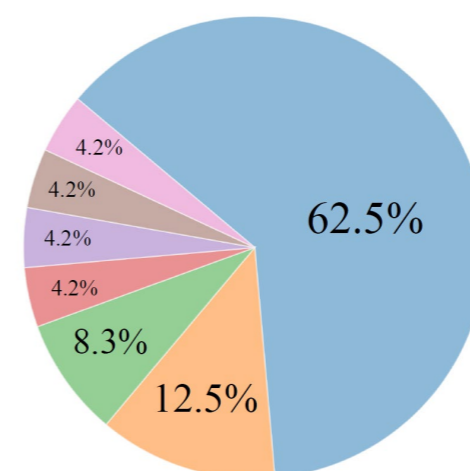


Figure 3. Patient proportion per institution with *C. auris* detection from 2021 to 2024.

Discussion

- This study is limited by the absence of clade analysis and antifungal susceptibility testing.
- C. auris* in urine: Potential colonization, but rising cases and institutions are alarming.
- A high proportion of 62.5% of total patients from a single institution suggests an outbreak and underscores the importance of infection control.

Conclusion

- The increase in patients and culture cases of *C. auris* from urine cultures across Korea is concerning.
- Healthcare institutions must strictly adhere to infection control guidelines upon detection of *C. auris*, and systematic investigations of transmission patterns within individual institutions are necessary.

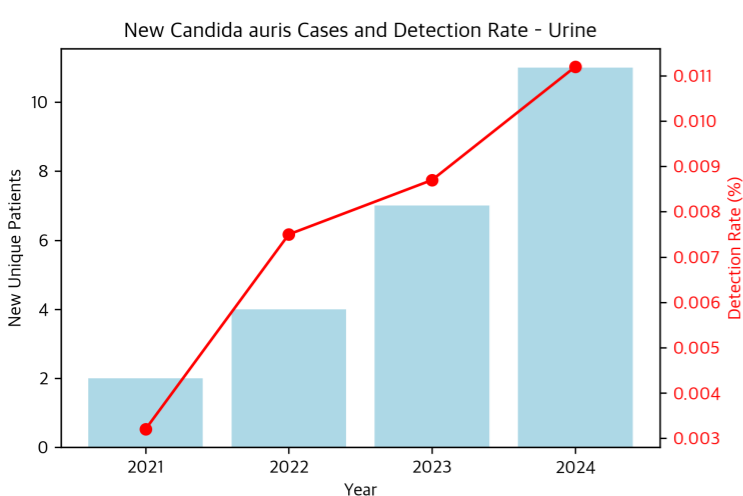


Figure 1. Annual number of newly identified patients with *C. auris* in urine

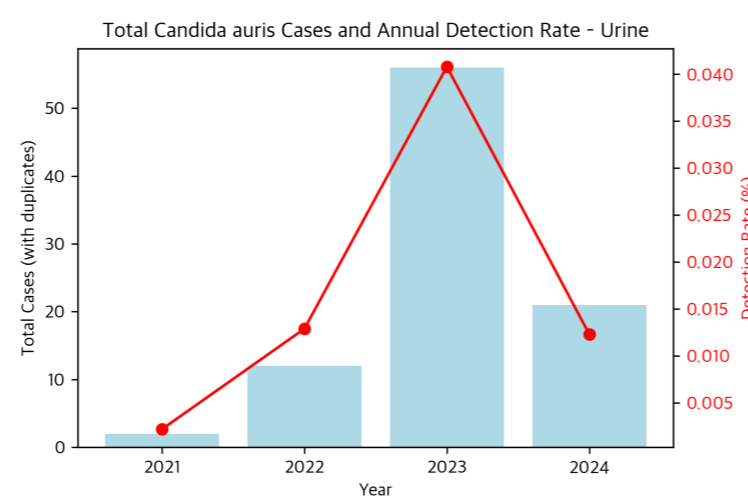


Figure 2. Annual number of urine samples with *C. auris*

Table 1. Annual number of newly identified patients and urine samples with *C. auris* in urine

Year	Numbr of <i>C. auris</i> detected		Total patients	Total urine samples
	Patients	Urine samples		
2021	2	2	62361	91394
2022	4	12	53405	92842
2023	7	56	80696	137391
2024	11	12	98161	170790