

Introduction

Multi-resistant *Acinetobacter baumannii* (MRAB-OXA-51, OXA-58) outbreak in ICU

Unusual number of candida isolates and time clustering observed simultaneously

The aim of this study → to analyse candida-isolation increase



Materials and Methods

A 4-month retrospective observational study, concurrently with the MRAB outbreak, was developed.

All *Candida* spp. isolated from ICU-patients suggesting infection were included.

0	No growth	No colonization
1+	1-10 UFC/mL	Low colonization
2+	>10-10 ³ UFC/mL	Low colonization
3+	>10 ³ -10 ⁵ UFC/mL	Intermediate colonization
4+	>10 ⁵ -10 ⁷ UFC/mL	High colonization
5+	>10 ⁷ UFC/mL	High colonization

Table 1. Candida colonization

Identification and susceptibility were performed by VITEK 2-System.

Candida colonization → semi-quantitative Leonard method.

Risk factors for candida infection and Candida score (CS) were determined.

Results

35 candida isolates producing infection were included.

For the same period of time in the previous five years, the media of the candida isolates producing infection was 4 times lower (Fig1).

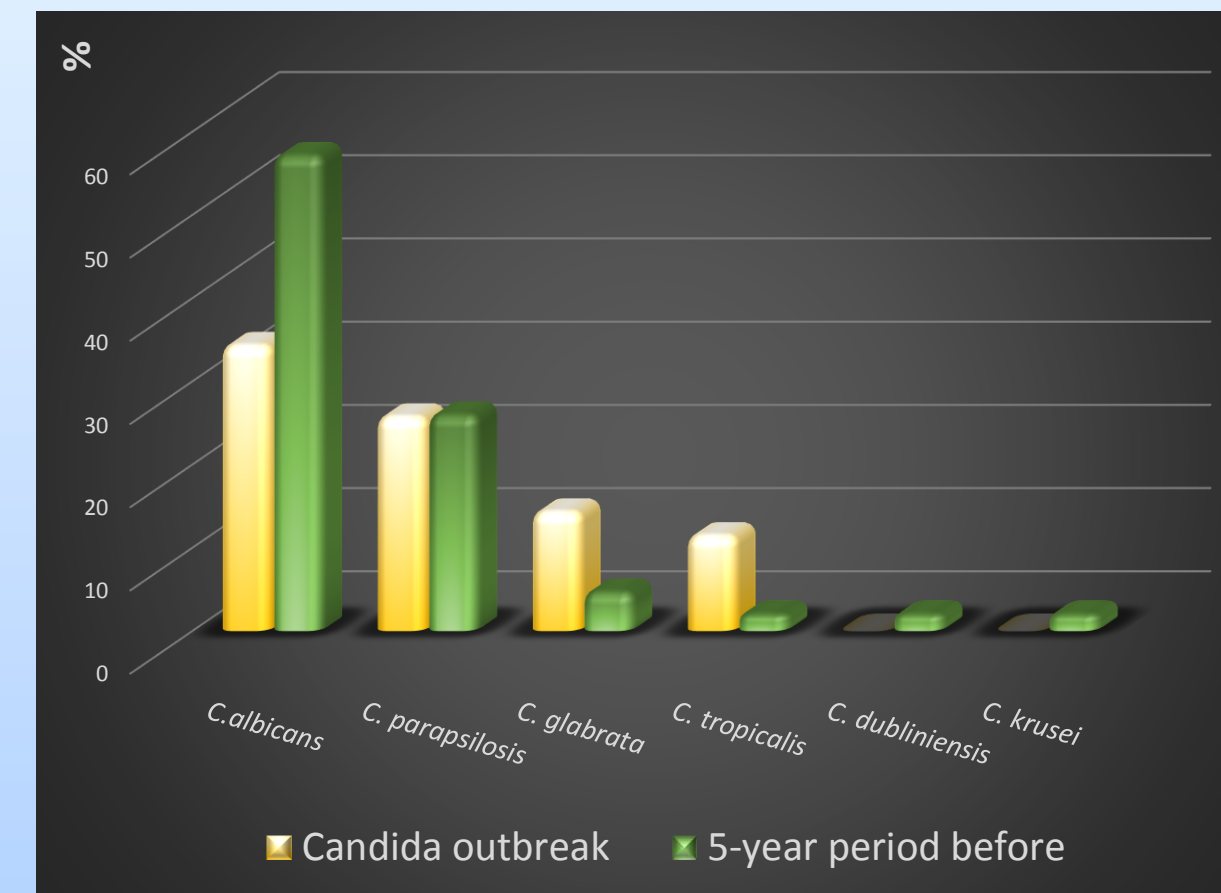


Table 2. Risk factors for candida infection

N	11 ICU-patients
Age	age range:38-74, mean age: 54.73±11.41
Gender	6 (54.54%) female, 5 (45.46%) male
Aetiology	Non- <i>C. albicans</i> : 51.43% (<i>C. parapsilosis</i> (25.71%), <i>C. glabrata</i> (14.29%), <i>C. tropicalis</i> (11.43%)). <i>C. albicans</i> : 34.29%. <i>Candida</i> ssp: 14.29%.
Candida infection:	
Urinary tract	12 (34.29%)
Intraabdominal	3 (8.57%)
Bloodstream	1 (2.86%)
Central venous catheter	1 (2.86%)
Surgery wound	1 (2.86%)
Respiratory tract	14 (40%)
Others	3 (8.56%)
Colonization level:	
Low	0%
Intermediate-High	100%
Underlying diseases/Comorbidities	63.64%
APACHE II score	range: min 7; máx 38.
Glasgow coma scale	15 (90.90%); - (9.10%)
Invasive procedures	100%
Extended-spectrum antibiotics	100%
Bacterial infections	90.90%
Previous hospitalization	Yes: 45.45%; No: 54.55%. -
Surgical patient	36.36%
Medical patient	63.64%
Candida score	<3: 54.54%; >3: 45.46%
Days in ICU	mean: 34.27±30.45 (máx 102; mín 6)
Exitus	Yes: 27.27%; No: 72.73%

Conclusions

- 1-Candida-infection increase was caused by NCACS, mainly *C. glabrata* and *C. tropicalis*.
- 2-As cross-infection was probed for MRAB, cross-transmission for candida was possible, too.
- 3-The intensity of candida colonization in ICU-patients plays an important role predicting candida infections.
- 4-Unusual number of *Candida* spp. isolates could be investigated as a predictor of cross-transmission for other microorganisms.

