CANDIDEMIA RISK FACTORS IN PATIENTS FOLLOWED-UP IN ONCOLOGY HOSPITAL

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Objective: *Candida* spp.cause blood stream infections which has a growing importance among nosocomial infections. These infections are a significant cause of morbidity and mortality. The purpose of this study was to evaluate the epidemiological characteristics, risk factors, antifungal suspectibility and prognosis of patients followed with candidemia in Dr. Abdurrahman Yurtaslan Ankara Oncology Training and Research Hospital.

Materials and Methods:

Between 1st January 2012 and 1st March 2016, data of patients with candidemia were recorded into a form, cases admitted at the same period and had no candemia were taken as a control group. Candidemia cases and control groups were compared in terms of epidemiological characteristics and potential risk factors.

. SPSS 16.0 software was used for statistical analysis "BackwardConditional" was used in logistic regression analysis.

Findings: In 60 patients with candidemia diagnosis, mean age was 57.25 ± 18.250, 37 (61.7%) males and 23 (38.3%)females were identified. 26 patients (43.3%) in the intensive care unit (ICU) and 34 (56.7%) patients in other services weref ollowed up. In the control group of 60 patients, mean age was 58.620 ± 16.587 and there were 35 (58.3%) males and 25 (41.7%) females 21 (%35) patients were in intensive care unit and, 39 (65%)patients were in other services were followed up. Of 60 patients with candidemia, 33.9% solid organ malignancy, 30.5% gastrointestinal tumors, 22% hematologic malignancy, 5.1% cerebrovascular events, 3.4% gastrointestinal pathology and %5,1 other underlying diseases. In cases with candidemia diagnosis,length of stay was in ICU was found to be (days average ± SD)16.920 ± 26.612. (63.3%) of the patients with candidemia died.

. The most common risk factors were urinary catheter (96.7%) use, a broad-spectrum antibiotic use (91.7%), central venous catheters (86.7%)use, intubation duration (53.3%) and totally parenteral nutrition (TPN) (51%, 7)for the development of candidemia. .TPN, using imipenem, meropenem and piperacillin-tazobactam were determined as the most important risk factors in multivariate analysis. The most frequently isolateds pecies were *C. albicans* (48.3%), *C. glabrata* (13.3%), *C.parapsilosis* (10.0%), *C.krusei* (8.3%), *C.tropicalis* (8.3%), *Candida* spp. (5%), *C.lipolytica* (1.7%) and *C. famota* (1.7%) in sixty patients with candidemia. 38 (63.3%) of the patients with candidemia died.

Table 1. Demographic and Clinical Characteristics of Patients with Candidiasis and Control Groups

Feature	Candidiasis (n: 60)	Control (n: 60)	P
Age (mean ± SS)	57,25 ± 18,250	58,620 ± 16,587	0,669
Duration of stay in intensive care unit (mean day ± SS)	16,920 ± 26,612	4,92 ± 8,199	0,001
Glaskow coma score (mean ± SS)	11,22 ± 3,523	12,35 ± 3,579	0,083
Time of neutropenia (mean day ± SS)	18,14 ± 14,660	13,88 ± 8,202	0,460

Table 2. Candidemia Risk Factors (Multivariate Analysis)

Risk factor	P	OR	%95 GA
TPB	0,002	15,5	2,5-72,2
PTZ	0,006	16,2	2,2-119,5
Meropenem	0,011	9,5	1,7-53,9
Imipenem	0,014	34,3	2,0-580,4

Results: In this study, the most common risk factors for the development of candida blood stream infections were urinary catheter use, a broad-spectrum antibiotic use and totally parenteral nutrition. The most frequently isolated species were *Candida albicans*, non-*albicans* species were also found to be high overall. Increasing resistance toamphotericin-B was observed in *Candidaalbicans.*