Letter to Editor

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# Dynamics of Anidulafungin use in a Tertiary Care Hospital

Internal Medicine Section

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Dear Editor,

Fungal agents have been reported to be more frequently responsible from health care associated infections in recent years [1]. New antifungal agents for invasive fungal infections are introduced to market and we wanted to evaluate our dynamics in use of one of them, the anidulafungin use in our patients with suspected invasive fungal infection.

The study was designed as an observational retrospective single center study in a tertiary care hospital. The patients who were treated with anidulafungin, either empirically or culture based, even for one day were included. The pharmacy reports and infection control team consultation reports as well as hospital data base were used. A total of 27 patients included [Table/Fig-1]. Candida spp. was revealed from 14 (52%) patients: 4 (15%) *C. albicans*, 8 (30%) non-albicans *Candida* (NAC) and in 2 (7%) patients both *C.albicans* and NAC were revealed. From the culture positive 14 patients, only 9 (64%) had subsquent culture samples after initiating antifungal therapy, the remaining 5 patients either didn't have a control blood culture because either they died (n=4) while they were under anidulafungin therapy or referred to another center and lost from follow-up (n=1). Culture negativity was achieved in a median of 3 days in all of the remaining 9 patients (100%) who have subsquent culture samples. Only one patient had another positive culture on the 12$^{th}$ day of therapy, after achieving negative blood culture on the 2$^{nd}$ therapy day. No source was found for persistence of candidemia and control blood culture was again turned to negative on the 19th day of therapy. Of total 27 patients, 22 (82%) patients had died because of underlying medical problems, 11 (44%) of the patients had died before they completed anidulafungin therapy and median anidulafungin therapy duration of these 11 patients were only 5 days (2-15days). As conclusion, anidulafungin was used in elder patients who have long hospitalization duration especially in ICUs; all the patients who have subsquent culture samples were achieved culture negativity under anidulafungin therapy; culture negativity was achieved in a median of 3 days. Attributable mortality cannot be calculated because of the study-design and controlled randomized studies are needed in these complicated patients of ICUs.

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| Gender, male/female(n) | 15/12 |
| Age, median & range | 67 (21-94) |
| Culture positivity, n (%)<br>*Candida albicans*<br>Non-albicans *Candida*<br>Both *C. albicans* and NAC | 14 (52)<br>4 (15)<br>8 (30)<br>2 (7%) |
| Subsquent culture, n (%) | 9 (64) |
| Culture negativity, days, median | 3 |
| Relaps under therapy, n (%) | 1 (4) |
| Mortality, n, (%) | 22 (82) |

**[Table/Fig-1]:** Demographic variables of the patients under anidulafungin therapy (n=27)

## REFERENCES

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