

TRENDS OF CANDIDEMIA AMONG SURGICAL INTENSIVE CARE UNIT (SICU) PATIENTS

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Candida species have become a common cause of bloodstream infections (BSI) among patients in surgical intensive care units. Starting in 1995, early presumptive therapy with fluconazole 400mg IV was recommended for SICU patients at high-risk for systemic *candida* infection. The emergence of non-*albicans Candida* species should direct efforts to re-evaluate antifungal use.

Purpose: Evaluate SICU specific antifungal drug use and the trend in incidence of BSI due to different *Candida* species.

Method: A 2-year retrospective analysis of patients admitted to the 27-bed SICU between January 1, 2001 and December 31, 2002 was done. SICU specific antifungal drug usage data was electronically transferred to a program specific for this analysis. Antifungal use was expressed in defined daily doses (DDD) listed in the table. Microbiology data included all *Candida* BSI from 1995-2002. Microbiology data from 1995-2000 was pooled since SICU specific antifungal use was not available. Demographic data included the total number of patients admitted or transferred to the SICU and their mean length of stay.

Results:

Candidemia	2001 n=8	2002 n=13	Antifungal DDD	2001 doses (%)	2002 doses (%)
<i>C. albicans</i>	0	6	Fluconazole 400mg	2713 (67%)	2599 (62%)
<i>C. tropicalis</i>	5	4	ABLC 350mg	330 (8%)	322 (8%)
<i>C. glabrata</i>	2	1	Amphotericin B 50mg	990 (25%)	814 (19%)
<i>C. parapsilosis</i>	0	2	Caspofungin 50mg	0	448 (11%)
<i>C. utilis</i>	1	0			

Microbiology data from 1995-2000 revealed an average of 14 *Candida* BSI/year, 56% were *C. albicans*. Non-*albicans Candida* species accounted for 100% of BSI in 2001 and 54% in 2002. The number of patient admits/transfers to the SICU in 2001 and 2002 were 2,706 and 2,641 respectively, with an average length of stay = 4.81 and 4.87 days.

Conclusion: Non-*albicans Candida* BSI are prevalent in this SICU. Fluconazole is the primary empiric/presumptive antifungal. Caspofungin or high-dose fluconazole may be more prudent for empiric/presumptive use, until the *Candida* species is identified. The recent availability of SICU specific antifungal data will allow us to perform analyses correlating fluconazole use and rates of BSI due to non-*albicans* species of *Candida*.