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Abstract (poster session)

Evaluation on "real life" prescriptions of antifungal prophylaxis in high-risk patients: preliminary results from a prospective survey

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Objectives:To describe the current use of antifungal (AF) prophylaxis in consecutive, unselected adult patient with acute myeloid leukemia patients (AMLs) at first induction of remission and to analyze the efficacy of prophylaxis with posaconazole (POS) when compared to old azoles in a "real life" setting. **Methods:**From January 2010 to March 2011, all newly diagnosed AMLs have been consecutively registered and prospectively monitored in 31 Italian participating centers. Only adult cases that received conventional chemotherapy were included in the present study. Principal demographic and clinical data, as well as antifungal treatments were collected. In particular we analyzed data about systemic AF prophylaxis: the drug of choice, the duration of treatment, and its efficacy were thus evaluated. To determine prophylaxis efficacy, incidence of proven/probable IFDs was assessed at 30th day from the end of chemotherapy. **Results:**498 AML were evaluated in the present analysis. The most part of them (448, 90%) received systemic antifungal prophylaxis. POS was the most frequently employed drug (224/448, 50%), followed by fluconazole (128, 29%) and itraconazole (86, 19%). When comparing the POS group (224 pts) to those receiving itraconazole or fluconazole (214 pts) (FLU/ITRA) no significant differences emerged in terms of the main risk factors for IFDs (table). In particular the 2 groups resulted to be comparable in terms of age, sex, frequency and duration of deep neutropenia, days of prophylaxis. On the contrary, there were significant differences in breakthrough IFDs (6.2% in POS vs 11.7% in FLU/ITRA, p-value 0.04). Except for one case of fusariosis, all mold infections were invasive aspergillosis. Yeast infections also were more frequent in the FLU/ITRA group. Caspofungin and amphotericin B compounds were the most frequently employed drugs, as empirical/pre-emptive treatments. There were no significant differences in the response rate, nor in the IFDs attributable mortality rate. **Conclusion:**During the last few years the use of POS prophylaxis in high risk pts has significantly increased. Although not randomized, our study demonstrates in a "real life" setting the increased use and the higher efficacy of POS prophylaxis, when compared to FLU/ITRA. Only 14 patients developed a breakthrough IFDs. Surprisingly, POS superiority emerged for both molds and yeasts infections. Previous AF prophylaxis doesn't seem to impact IFDs outcome.

Table 1: comparison between POS and FLU/ITRA groups

	FLU/ITRA	POS
	214	224
Mean age (years)	57.7	53.5
Sex		
- male	112 (52%)	101 (45%)
- female	102 (48%)	123 (55%)
Deep neutropenia	210 (98%)	213 (95%)
Central venous catheter	119 (56%)	143 (64%)
Mean duration of deep neutropenia (days)	19.5	21.5
Median AF prophylaxis duration (days)	20	20
Empirical/pre-emptive therapies	59 (28%)	71 (32%)
Most used drugs as empirical/pre-emptive therapy	- L-AmB 18 (30%) - Caspo 17 (29%) - Vorico 8 (14%) - CL-AmB 8 (14%) - Others 8 (14%)	- L- Am b 39 (55%) - Caspo 12 (17%) - Vorico 6 (8%) - CL-AmB 2 (3%) - Others 12 (17%)
Proven/probable IFDs	25 (11.7%)	14 (6.2%)
• moulds	- 17 (7.9%)	- 11 (4.9%)
• yeasts	- 8 (3.7%)	- 3 (1.3%)
Molds/yeasts ratio	2.1/1	3.7/1
Favourable responses (RR)	14/25 (56%)	11/14 (79%)
N° deaths (AMR)	7/25 (28%)	2/14 (14%)
• moulds	4	1
• yeasts	3	1

Legend: AF: antifungal; IFD: invasive fungal disease; L-AmB: liposomal Amphotericin B; CL-AmB: lipid complex Amphotericin B; RR: response rate; AMR: attributable mortality rate; pos: posaconazole; flu: fluconazole; itra: itraconazole.