

O411

Abstract (oral session)

**Clinical and microbiological efficacy and toxicity of different dosages of colistin in critically patients**

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**Objectives:** The recommended dosage of colistin is 2.5 – 5 mg/kg per day. The optimum dosage for critically ill patients has not been determined. The aim of this study was to evaluate the clinical and microbiological efficacy and toxicity of different dosages of colistin in critically ill patients infected with multidrug resistant microorganisms. **Methods:** The study was conducted in the 600-bed Ankara Ataturk Training and Research Hospital. Patients from intensive care who received colistin over a minimum of a 48-hour period of time were evaluated. Clinical response was defined as resolution of fever and clinical and laboratory findings. Microbiological response was defined as bacteriological eradication from infection site. Nephrotoxicity was defined as at least two consecutive Scr measurements with an increase of 0.5 mg/dL from baseline at least 24 hours apart after two or more days of colistin therapy. **Results:** 44 patients were included in the study. Clinical response was obtained in 33 out of the 44 cases (75%) and microbiological response was obtained in 31 out of the 44 (70.5%) patients. Patients were grouped according to the colistin dosage. 22 patients received 2 x 150 mg whilst the other 22 patients received 3 x 75 mg. The clinical response rates were 68.2% and 81.8% respectively ( $p>0.05$ ). The microbiological response rate was 63.6% and 77.3% ( $p>0.05$ ). Nephrotoxicity was revealed in 12 out of 22 patients (54.5%) for the 2x150 mg group and 8 out of 22 patients (36.3%) in the 3 x 75 mg group ( $p=0.04$ ). **Conclusion:** The nephrotoxicity rate was found to be more frequent in the patients on the higher dosage of colistin. With no difference of clinical and microbiological response rate between the two groups, the implication is that higher doses of colistin may not be necessary, even in intensive care.