

EV0656

ePoster Viewing

Epidemiology of nosocomial infections

Colonization and infection of multidrug-resistant *Acinetobacter baumannii*

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**Objectives:** The objective of this study was to determine the occurrence of colonization and subsequent infection with multidrug-resistant *Acinetobacter baumannii* (MDRAB) in the Hospital Clínico Universitario Virgen de la Arrixaca (HCUVA), Murcia (Spain).

**Methods:** Surveillance cultures (SC) including rectal swab (RS), pharyngeal swab (PS) and/or skin swab (SS) were obtained. The samples were cultured in Mac Conkey agar with a cefotaxime disk. All cefotaxime resistant colonies were studied. The identification and antibiotic susceptibility testing were performed with Vitek 2® (BioMérieux).

**Results:** From January 2012 to October 2013, a total of 273 patients were screened (168 admitted in two Critical Care Units, 91 admitted in surgical areas and 14 admitted in medical areas). 55 patients (20.1%) were colonized by MDRAB. The average was  $66.8 \pm 15.5$  (15-86) and 35 colonized patients were male (63.6%). 1203 samples were collected: 405 RS (33.6%), 375 PS (31.2%) and 423 SS (35.2%). MDRAB was isolated in 97 samples (8%), 47 RS (47/405, 11.6%), 28 PS (28/375, 7.5%) and 22 SS (22/423, 5.2%). All the strains were resistant to carbapenems. Nineteen patients (34.5%) became colonized during hospital stay. MDRAB was isolated in 22 patients (44%) after the positive SC (mean 3.6 days, 0-9 days): 11 bronchial lavage fluids (BLF), 5 wounds and surgical site infections, 3 bacteremias and 3 complicated urinary tract infections (count  $>10.000$ CFU/ml). In BLF and wounds and surgical site infections, colonization or infection can consider different according medical criteria.

**Conclusions:** Isolating carriers of MDRAB is the main measure to prevent its spread. The RS samples showed greater detection of MDRAB carriers. High percentage of patients had a serious infection by MDRAB after the SC. MDRAB may be carried for long durations.