

**P1083**

**Poster Session IV**

**Resistance surveillance in Gram-negatives**

**RESISTANCE OF BACTERIA ISOLATED FROM CLINICAL SAMPLES IN HOSPITALIZED PATIENTS IN THE BURN UNIT AND PLASTIC SURGERY WARD IN A GREEK HOSPITAL, DURING FIVE YEARS**

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**Objectives:** To evaluate the resistance pattern of bacteria isolated from clinical samples in hospitalized patients in the Burn Unit and Plastic Surgery ward in a tertiary hospital of Athens during five years (2008-2012)

**Methods:** A total number of 2799 bacterial strains were isolated from clinical samples (pus, bronchial secretions, blood) and identified by conventional methods. The antibiotic susceptibility was performed by Kirby-Bauer method and the MICs were determined by Vitek II system and E-test method.

**Results:** Similar number of bacteria was isolated per year (2008 n:672, 2009 n:513, 2010 n:520, 2011 n:572, n:522). Gram (-) bacteria were the predominant (2193 strains). The total number of isolated Gram (-) bacteria was similar per year (~ 400 strains) while a decrease was observed in the number of cocci in the years 2010, 2012 (93, 118 strains, respectively, versus 150 the rest of the years). The most common Gram (-) bacteria per year and in total were *P. aeruginosa*, *A. baumannii*, *K. pneumoniae* and from the cocci *S.aureus* and Coag (-) Staphylococci.

In *P. aeruginosa* strains a decrease of resistance was observed to carbapenemes during the two last years (2008 72%, 2009 51%, 2010 40%, 2011 46%, 2012 53%), while the resistance to colistin was similar (~3%).

*K. pneumoniae* strains revealed increasing resistance to carbapenemes (58% in 2008 to 70% in 2012) and high ratio resistance to tigecycline (2010:21%, 2011:37%, 2012:36%).

*A. baumannii* strains were fully resistant to carbapenems, resistance to amikacin was doubled (from 44% in 2008 to 83% in 2012) and a new resistance was first observed in colistin in the year 2011(1%) and 2012 (2%).

Coag (-) Staphylococci were resistant to oxacillin 91%, unlike *S. aureus* where MRSA strains decreased from 76% in 2008 to 38% in 2012. No resistance was observed to glycopeptides, linezolid and daptomycin.

**Conclusions:** The Gram (-) bacteria (*P. aeruginosa*, *A. baumannii*, *K. pneumoniae*) were predominant during the study period (2008-2012)

The resistance of Gram (-) bacteria to carbapenemes was high (80%) with the exception of *P. aeruginosa* (45%)

A new resistance of *A.baumannii* strains to colistin was observed in the last two years

No isolated strains of *S.aureus* were resistant to glycopeptides, linezolid and daptomycin while the MRSA strains almost halved during the study period

A strict implementation of appropriate antibiotic use and hand hygiene rules are mandatory