

P1288

Abstract (poster session)

Prevalence of carbapenemase-encoding genes including New Delhi metallo beta-lactamase in Acinetobacter species environmental and clinical isolates, Algeria

E. Mesli, M. Berrazeg, M. Drissi, S. Bekhoucha, J.M. Rolain* (Marseille, FR)

Objectives: Nosocomial infections caused by carbapenem-resistant *Acinetobacter* spp. are a global health problem. The aim of the study was to evaluate the prevalence of carbapenemase encoding genes in *Acinetobacter* spp. clinical isolates recovered from three different hospitals in western Algeria from 2008 to 2012. **Methods:** A total of 113 *Acinetobacter* spp. isolates were identified using API 20NE system and confirmed by MALDI-TOF mass spectrometry. The antimicrobial susceptibility testing and MICs were determined by the dilution method on Mueller Hinton agar for beta-lactams, aminoglycosides, ciprofloxacin and colistin. The characterization of beta-lactamases was investigated by phenotypic tests for the detection of metallo- β -lactamases (MbetaL) and oxacillinases and the resistance genes were screened for quantitative PCR and sequenced when positive. **Results:** The determination of MICs showed high levels of resistance to beta-lactams with MICs $\geq 512\mu\text{g/ml}$ to ceftazidim and 64-512 $\mu\text{g/ml}$ to imipenem. The multidrug-resistant *Acinetobacter* spp. isolates showing resistance to carbapenems harbored blaOXA23-like with a prevalence of 48.7% (38/78), and blaOXA24-like with a prevalence of 21.8% (17/78). In addition, the metallo- beta-lactamase blaNDM-1-like has been detected in five isolates (6.4%). **Conclusion:** This study represents the first description of *Acinetobacter* spp. producing oxacillinases blaOXA23-like, blaOXA24-like and metallo-beta-lactamase blaNDM-1-like in western Algeria.