

O600

Abstract (oral session)

Risk factors and outcomes of infective endocarditis among methicillin-resistant *Staphylococcus aureus* bacteraemia. Prospective study in 21 Spanish hospitals

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Objectives: To evaluate the risk factors for infective endocarditis (IE) among a large cohort of methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia, taking into account clinical and microbiological identifiers as well as antibiotic therapy. Methods: Prospective cohort study from Ju-2008 to Dec-2009 among 21 Spanish hospitals. All episodes of MRSA bacteremia were included. Demographic and clinical information were recorded and strains were studied in a central lab, including antibiotic susceptibility and molecular characterization. Ecocardiography was necessary for the diagnostic of IE, which was the dependent variable in a logistic regression model. Results: 583 episodes were included, 32 (5%) were diagnosed with IE. Localization: Mi: 17 (53%), Ao 8 (28%), Tr/Pul 4 (13%). Prosthetic IE: 7 (22%). 5 (16%) IE on pacemaker. Isolates vancomycin and daptomycin MIC₉₀ were 1 and 0.5 ug/ml. Pulse-type 2 observed in 77% of the isolates (agr2, MLST125), LPV genes were not harbored by any of IE episodes isolates. Appropriate initial antibiotic therapy (first 48 hours): 26 (84%). Antibiotic therapy duration (mean, range): 42 days (9-65 d). Surgery on the infected valve(s) needed in 10 patients. Complications and outcome: distant hematogenous seeding 10 (31%). Blood cultures were sterilized (mean) in 9 days (SD 6.6 d). Persistent bacteremia observed in 15 (56%) episodes. 30-day mortality: 17 (53%). 1 relapse was observed. Risk factors for IE were Pitt score >3 [OR 3.33 (1.08-10.3)], unknown portal of entry [OR 24.21 (6.67-87.9)], distant hematogenous seeding [OR 42.58 (11.68-155)] and foreign bodies presence [OR 3.57 (1.07-12.0)]. Conclusion: IE incidence among MRSA bacteremia is high, and is related to the severity of sepsis, distant hematogenous seeding, foreign bodies presence and absence of known portal of entry. Overall mortality was also high in our cohort of patients.