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ePoster Viewing

Sepsis, bloodstream and graft infections: Staphylococcus aureus and others

PREDICTORS OF PERSISTENT *S. AUREUS* BACTERAEMIA AND IMPACT IN RELATED MORTALITY.

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Objectives: The aim of our study was to evaluate the predictors of persistent *S. aureus* bacteraemia (PSAB) and its influence on related mortality.

Methods: Episodes of SAB were prospectively registered and retrospectively studied from 2006 to 2011 in a 700 beds university hospital. Persistent bacteraemia was defined as the isolation of *S. aureus* in blood culture obtained after 48-72 hours of appropriate antibiotic treatment. Risk factors for persistent bacteraemia and for mortality were analysed performing an univariate and multivariate analysis.

Results: A total of 514 episodes of SAB were included. PSAB (n= 117, 22.8%) was more frequently community acquired and patients had more diabetes, acute or chronic renal failure, haemodialysis treatment, mechanical intubation and infection due to MRSA. The most frequent sources in patients with PSAB were abdominal abscess, endocarditis and arthritis. Multivariate analysis found diabetes (OR: 1.65; p = 0.040), haemodialysis (OR: 3.68; p= 0.004), arthritis (OR: 4.32; p = <0.0001), endocarditis (OR: 6.02; p = <0.0001) and abdominal abscess (OR: 7.79; p = 0.009) as independent predictors of persistent *S. aureus* bacteraemia. Factors independently associated with mortality were age (OR: 1.03, p=0.008), inappropriate empirical antibiotic treatment (OR: 2.03, p= 0.039), underlying disease (OR: 2.33, p=0.005), persistent bacteraemia (OR: 2.52, p=0.003), septic metastases (OR: 3.56, p=0.001) and shock (OR: 5, p<0.0001).

Conclusion: Persistent bacteraemia and inappropriate empiric antibiotic are the modifiable factors that have a significant impact on mortality. Management improvement of SAB is essential for increasing survival.