

P2373 Spinal infection in *Staphylococcus aureus* bloodstream infection: important and under-recognized?Robert Tilley*¹, Lewis Jones¹¹ University Hospitals Plymouth NHS Trust

Background: *Staphylococcus aureus* bacteraemia (SAB) is common with a high mortality. No focus is found in approximately 20% of cases, which has an especially high mortality. Much importance is placed on controlling foci, and the role of echocardiography in SAB. Spinal infection is a recognised focus and complication of SAB but specific rates are rarely reported. Its diagnosis is important as source control may be possible, potentially reducing mortality and morbidity, including chronic pain and paralysis.

Materials/methods: A *post hoc* analysis of consecutive SAB cases was carried out in a British 1000 bed, tertiary referral hospital between 2013 and 2015. 213 blood cultures yielding a pure growth of *S.aureus* (or *S.aureus* with low virulence organisms considered to be contaminants) were included. Infective foci were recorded for all cases. Separate analyses were carried out to identify cases where endocarditis or discitis were present. Many cases were multifocal; the separate analyses included spinal and endocarditis cases identified at any point in the patient's treatment episode, regardless of other foci. As a tertiary referral centre for spinal and cardiothoracic surgery, externally referred cases to either group were excluded from the analysis.

Results: Of 213 positive blood cultures, 25 cases of SAB with a spinal focus were identified. 4 were excluded as external referrals to the spinal unit. Of the remaining 21, 16 had MRI proven discitis, 2 had CT evidence, 2 died with a clinical diagnosis of discitis but negative early MRI scans, 1 died prior to imaging taking place.

19 cases of SAB with endocarditis were identified. 3 were excluded as external referrals for cardiothoracic surgery. Of the remaining 15, 14 had echocardiographic evidence of IE. 2 were clinically managed as IE despite negative echocardiography.

Conclusions: In our cohort, MRI-proven spinal infection rates were high (7.7%); comparable with those of echocardiographically proven endocarditis (6.7%). We believe that early recognition of spinal infection is important as management may alter to a degree comparable with that of IE. Spinal infection in SAB may be under-recognized. Further work is required to ascertain the utility of more liberal use and optimal timing of spinal imaging.

