OP14

*Staphylococcus aureus* bacteraemia Audit - UK experience

De Silva SHCK, Deshmukh A, Makasinga S, Munthali P

1Department of Medical Microbiology, University Hospitals of Coventry and Warwickshire NHS Trust, United Kingdom

**Background:** *Staphylococcus aureus* bacteraemia (SAB) causes high morbidity, mortality and healthcare costs. There are national recommendations for minimal 14 days of IV antibiotics, repeat blood cultures and screen for endocarditis. Study was conducted in University Hospital Coventry (UHC). It is a most modern healthcare facility in Europe with 1,005 beds, 26 operating theatres and specialize in cardiology, neurosurgery, stroke, joint replacements, in vitro fertilization and maternal health, diabetes and kidney transplants. Management of SAB is continuously audited in UHC since 2007. The standard treatment pathway for the trust is underway.

**Objectives:** This is to assess the standard of care in management of SAB comparing the results of past 3-years and looking forward for further development.

**Methods:** Retrospective study conducted between June 2016 to December 2018. Electronic patient records were used.

**Results:** Total 153 patients were identified with SAB. Majority were >60 years. There were 25 intravenous drug users in the group and 6 presented with recurrence. There were only 2% MRSAs. In majority (28%), the source of infection was skin and soft tissue infections. Surveillance blood cultures were done in 76% patients. It is improved form 67% in last audit which was conducted between June 2016 and May 2018. Fifty one percent had undergone echocardiogram and 8% patients died before blood culture results are available. In 89% of patients appropriate treatment was started. More than 14 days of treatment was completed in 81% patients. Flucloxacillin, meropenem, ertapenem, daptomycin and other antibiotics were used for the completion of 14 days course. From total patients, 16% had complications and endocarditis was the commonest. The 60 days mortality rate was 21%.

**Conclusions:** The mortality rate and complications of SAB is high disregard of the effective antibiotics and further improvement of the clinical management is essential.