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ePoster Viewing

Antibiotic stewardship programmes

RESULTS OF A STEWARDSHIP PROGRAM FOR THE MANAGEMENT OF *S. AUREUS* BACTEREMIA

J. Boelens¹, I. Leroux-Roels¹, S. Callens², F. Buyle³, D. Vogelaers², On behalf of the Multidisciplinary Infection Team⁴

¹Laboratory medicine, Ghent University Hospital, Ghent, Belgium ; ²Internal medicine, Ghent University Hospital, Ghent, Belgium ; ³Pharmacy, Ghent University Hospital, Ghent, Belgium ; ⁴MIT, Ghent University Hospital, Ghent, Belgium

OBJECTIVES

Ghent University Hospital is a tertiary care teaching hospital with 1062 beds. Since January 2011, a multidisciplinary Infection Team (MIT) was established for daily follow-up of complex non-ICU infections. The team is composed of an infectiologist, clinical pharmacist and clinical microbiologist. One of the aims of the MIT is to contribute to a correct management of blood stream infections, including *S. aureus* (SA) bacteremiae (SAB).

METHODS

All positive blood cultures growing SA are discussed on a daily basis in the MIT. For each patient, an oral or written advice is given on duration and dosing of antibiotic therapy, the appropriateness and timing of a transthoracic (TTE) or transoesophageal (TEE) echocardiography and the removal of the central venous catheter. The MIT reassesses every case on a weekly basis and repeats or adjusts the advice when necessary.

For an echocardiography to be performed, the presence of 6 risk factors, i.e. positive blood cultures during >4 days, a permanent intracardial device, spondylodiscitis, non-vertebral osteomyelitis, valvular pathology and hemodialysis is evaluated prospectively.

Patients <18 years, in palliative settings and/or patients who died within 5 days after the first positive blood culture were excluded from this analysis.

Three quality indicators, developed by the ABS Quality Improvement project, are checked: the appropriate antibiotic IV during ≥10 days, removal of the central venous catheter within the first 10 days and echocardiography 10-14 days following the positive blood culture.

RESULTS

From 1/1/2013 until 1/11/2013, 64 SAB episodes occurred in the adult population. In 9 cases the causative organism was methicillin resistant (MRSA). Six patients were excluded from the analysis.

The appropriate IV antibiotic was correctly given during at least 10 days in 43 of 58 episodes of either MSSA and MRSA bacteremia.

Only in 2 of 32 cases the central venous catheter was not removed; 1 case because the catheter was too precious (no means of replacement) and the second because of thrombopenia. In 15 cases no catheter was present at SAB onset.

An echocardiography was done in 49/58 patients. However only in 23 patients the TEE or TTE was performed 10 to 14 days after the SAB onset. In 17/35 cases, the echocardiography was performed too early. An underlying medical condition could warrant the early echocardiography in only a few cases. In the subpopulation of patients presenting at least one of the six endocarditis risk factors, echocardiography at 10-14 days after SAB onset was only performed in 9 of 20 patients.

CONCLUSION

A MIT for active follow-up of SAB episodes can play an important role to improve the compliance to treatment guidelines. Additional efforts should be made to improve compliance to perform echocardiography within the defined time frame, especially in patients with endocarditis risk factors.