Conclusions: The mean VAP rate and VAP associated mortality at our hospital was less than that reported by NNIS System surveillance. Head trauma was the major risk factor for development of VAP. Prophylactic antibiotic use is prevalent in our unit. Etiologically, gram negatives predominated with MRSA being uncommon. Piperacillin-tazobactam and carbapenems were the favoured treatment choices. Additional studies are necessary for comparison and establishing antibiotic guidelines for treating ventilator associated pneumonia in the UAE.

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64.063

VRE Surveillance; the Challenge of Preventing Endemicity in a Singapore Teaching Hospital

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Background: The aims of this study were to develop a sensitive VRE screening procedure at National University Hospital (NUH), Singapore. The processes needed to be practical and to utilise available resources optimally.

Methods: The study was conducted in specific high risk wards of NUH notably, haematology-oncology, ICUs, long-term care, neurology and nephrology. The intervention involved active surveillance and focused on 3 major components to determine who would be swabbed; a risk index score for all patients, universal screening for all patients admitted from specific locations in Singapore and interval swabbing of all long stay patients. The risk index score was undertaken by assigning weighted point values based on local experience of risk factors associated with patients’ harbouring VRE. No pre emptive isolation was included but strict contact precautions were emphasised for patients with results pending. The (pre intervention) comparison group in this study were patients that were screened for VRE from specific hospitals on admission to NUH, patients who had contact with VRE patients and patients whose was stool sent for Clostridium difficile cytotoxin assay between Apr 2005 and Oct 2007. These had been cultured for VRE as part of a research project.

Results: The VRE detected was 11.09 per 1000 VRE swabs compared to 15.4 per 1000 VRE swabs before the intervention; \( p = 0.428 \). Average cost of isolation ranging $157 to $798 post intervention compared to before intervention, $1968 to $3985.

Conclusion: A larger sample size is required to evaluate efficiency of VRE screening procedure. However, the intervention has resulted in better bed allocation, identification of high-risk patients for VRE from external facilities and within NUH; and reduction in the hospitalization cost for the patients.

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64.064


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Background: Permanent pacemaker (PPM) and implantable desfibrillator-cardioverter (IDC)-related endocarditis is a infection that is associated with a substantial morbidity and mortality and also with a significant financial cost.

Methods: Observational and retrospective study. Setting: 700-bed tertiary hospital. Period: January 1996 to December 2006. PM and IDC inserted during this period were 1224 and 188 respectively. Cardiac device-related infective endocarditis (CDIE) was defined as the presence of both vegetation on a device lead or valve and clinical or microbiological evidence of CDIE.

Results: 27 patients fulfilled the CDIE criteria, 20 had a PPM and 7 an IDC. Incidence of PPM and ID related endocarditis were 1.8% and 3.1% respectively. Mean age 70 (range: 24 to 86 years). 70% were male. 12 had underlying cardiac conditions. 59% had early local complications (7 displacements, 9 hematomas or seromas). 52% had previous manipulations of the generator and/or the leads. Mean time between insertion and CDIE was 66 months (57 ± 53). 23 patients had late endocarditis and 4 early one. Most frequent pathogens were coagulase negative staphylococcus 37%, Staphylococcus aureus 30% and Enterococcus faecalis 15%. Most frequent antibiotics used were: cloxacillin 11, vancomycin 5, teicoplanin 2 and ampicilin 5. 89% of patients received combined treatment with an aminoglucosid (21) or rifampin (3). Intravenous treatment length was 34 days (±8). 52% patients prolonged antibiotic therapy by oral route. In 16 patients leads were replaced (44% by traction and 56% by open surgery). Complications were 2 septic emboli, 7 septic shock and attributable mortality was 1%.

Conclusion:

- Incidence of PPM and ID related endocarditis were 1.8% and 3.1% respectively.
- 60% of patients have had precocious local complications time before cardiac device-endocarditis diagnosis.
- Most were caused by grampositive cocci.
- More than 50% received prolonged courses of oral antibiotics after completing intravenous treatment.

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