Collaborative effort in managing VRE infection in Department of Neurosurgery
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Introduction
Over 100% patient occupancy in a general ward is not an extraordinary matter in Hong Kong hospitals. Such a crowded condition does not only disrupt the resting environment for patients, but also imposes difficulty in managing infection control. Infectious diseases could easily be spread in such a compact environment and it could contribute an unwanted crisis. In early winter of 2011, there was a Vancomycin-resistant enterococci (VRE) infection outbreak in Neurosurgical unit QEH, with three episodes of relapse across 6 months. Among the 47 confirmed carriers, the root cause analysis identified some common characteristics: (1) the patients were bed-ridden, (2) highly dependent, (3) most were immuno-compromised and (4) antibiotics were often used. The crisis was well-managed after six months with the collaboration of multiple disciplines and departments. It involved all the staff in the neurosurgery department, the infection control team, the allied health teams, the laboratory and the central support from the hospital. We started a series of strategic actions involving patient placement and segregation, environment and equipment decontamination, fine-tuned nursing care workflow, stringent hand hygiene compliance, and routine VRE screening. The department also implemented an antibiotics stewardship programme and advocated procalcitonin test to predict the risk of developing severe sepsis. In addition, hand hygiene practice, services provision, visiting policy, as well as patient discharge and transfer processes were also reviewed. Neurosurgical patients are a group of high risk patients for bacterial infections like VRE. Multidisciplinary collaboration against the issue is important. All staff of different departments has their essential roles. We are still working hard towards issues like staff engagement, the appropriate frequency of hand hygiene audits and the credibility of procalcitonin use in neurosurgery.