

would be a cost-effective measure in Singapore. **Conclusions:** We have provided evidence that adoption of a temporary isolation room would be cost-effective for Singapore acute-care hospitals. Using temporary isolation rooms may be a positive decision for other countries in the region with fewer resources for infection prevention and control.

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Subject Category: Outbreaks
Abstract Number: SG-APUSIC1076

Bacteremia caused by *Streptococcus mitis* in a hematology unit

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Objectives: *Streptococcus mitis* is a gram-positive coccus and is a common commensal found in the throat, nasopharynx, and mouth. In an immunocompromised host, *S. mitis* opportunistically multiplies and can translocate to other sites. At baseline, the prevalence of *S. mitis* remained stable among hematological patients, averaging ~1 case monthly. However, in August–September 2020, 5 *S. mitis* cases were documented in a hematology ward and included overlapping inpatient stays. In this descriptive cluster report, we sought to identify the reasons for the increased prevalence of *S. mitis* in our institution. **Methods:** A literature review was undertaken to gain a better understanding of the bacteriology of *S. mitis*. Subsequently, geographical mapping was performed to identify epidemiological links. Further culture and sensitivity testing was requested. Hand hygiene compliance, environmental audit, and handling of central lines within the ward were examined for any lapses in practice. **Results:** Based on geographical mapping, no epidemiological linkages were established between patients; they were admitted to different rooms and did not share any equipment. Moreover, based on the antibiogram, different bacteria sensitivities were recorded across the isolates from these patients. A hand hygiene and environmental audit result showed 100% compliance. Nurses performed care of central lines in accordance with guidelines. However, an investigation of changes in practice revealed that the use of a toothbrush had only recently been permitted as part of streamlining oral care for hematology patients. Because toothbrushes were not provided by the hospital, patients were utilizing their personal toothbrushes with no direct supervision of their oral care regimen. **Conclusions:** The prevalence of *S. mitis* in hematological patients was likely due to the neutropenic condition of patients. This report provides valuable information supporting the optimization of oral hygiene in immunocompromised patients while minimizing the risk of opportunistic infections.

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Strategies to reduce hospital-onset *Clostridioides difficile* infections in an acute-care hospital in Singapore

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Objectives: Control of *Clostridioides difficile* infections (CDIs) in health-care facilities presents significant challenges to infectious disease physicians, infection prevention and control practitioners, and environmental

services staff. CDI is a common cause of infectious diarrhea and is associated with significant morbidity, mortality, and healthcare cost. A high infection rate was documented in our institution in 2017, higher than the national infection rate. Strategies to reduce hospital-onset CDI were implemented after review of international guidelines and relevant literature. The impact on hospital-onset CDI was assessed. **Methods:** The following strategies were implemented beginning early in 2018: (1) contact precautions for patients with diarrhea; (2) early recognition and diagnosis of *C. difficile* infection; (3) prompt isolation of *C. difficile* patients; (4) emphasis on hand hygiene and contact precautions; (5) enhanced environmental cleaning with chlorine-based disinfectant and use of UV-C and ionized hydrogen peroxide for equipment disinfection; (6) enhanced cleaning and disinfection using sporicidal wipes for shared high-risk equipment; (7) audit and feedback regarding compliance with practices and environmental cleaning; and (8) collaboration with antibiotics stewardship program (ASP) to reduce inappropriate antibiotic use. Hospital-onset CDI cases were tracked by infection prevention and control nurses using definitions from the Singapore Ministry of Health. **Results:** In total, 135 hospital-onset *C. difficile* infection cases occurred in 2017, a rate of 4.2 per 10,000 patient days. This rate gradually decreased to 3.0 in 2018 and to 2.3 in 2020, with an average of 87 infections per year. This rate further decreased to 1.8 infections per 10,000 patient days in 2021, with 61 clinical infections. **Conclusions:** Using multimodal strategies, CGH achieved a gradual and steady reduction in hospital-onset CDI over several years. These strategies require close collaboration among various departments to achieve the desired outcome.

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Effectiveness of a surgical-site infection bundle in reducing postoperative infection in cesarean deliveries in a tertiary-care teaching hospital in Malaysia

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Objectives: Surgical-site infections (SSIs) cause significant increases in mortality, morbidity, and prolonged hospitalization after cesarean deliveries. We assessed the effectiveness of the implementation of an SSI bundle in reducing postoperative infections in cesarean deliveries in a tertiary-care teaching hospital in Malaysia. **Method:** We conducted a quality-improvement study on all women who underwent labor and scheduled cesarean sections at the University Malaya Medical Center (UMMC) between May and December 2020. The preintervention period was May–June 2020 and the postintervention period was September–December 2020. Patients were followed for 90 days after their operation. Before the intervention, SSI rates and compliance with prevention practices were documented. A multidisciplinary team was formed, and education regarding the elements of the SSI prevention bundle was conducted before they were implemented. The care bundle focused on monitoring compliance with preoperative bathing, contact time for skin preparation, hair management, and antibiotics prophylaxis given within 60 minutes prior to incision, as well as patient education. **Result:** With the implementation of the SSI bundle, we observed a significant reduction in the SSI rate by 50%, from 7 per 100 procedures to 2 per 100 procedures. Compared with the preintervention period, overall compliance with bundle elements improved greatly for preoperative bathing (0 vs 95.7%) and contact time for skin preparation (0 vs 98.8%). In the postintervention period, the method of hair removal was documented, compared to no documentation during the preintervention period. The administration of prophylactic antibiotics within 60 minutes prior incision decreased from 99% to 92.3%. **Conclusion:** Implementation of an SSI prevention bundle successfully reduced the rate of SSI after