Comparison of Community-Associated and Healthcare-Associated Methicillin-Resistant Staphylococcus aureus (MRSA) in Canada: CANWARD 2007-2009

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ABSTRACT

Figure 1. Proportion of MRSA strains identified as community- or healthcare-associated by spa epidemiology of CA-MRSA and HA-MRSA in Canada:

Figure 2. Distribution of PVL(+) and PVL(-) agr types among MRSA strains identified in CANWARD as community- or healthcare-associated.

Figure 3. Distribution of agr types among community- and healthcare-associated MRSA.

Figure 4. Distribution of SCCmeC types among community- and healthcare-associated MRSA.

Figure 5. Distribution of vancomycin-susceptible, heterogeneous vancomycin-intermediate S. aureus (hVISA) detected among community- and healthcare-associated MRSA.

Figure 6. Distribution of community- and healthcare-associated PVL(+) and PVL(-) MRSA strains.

Figure 7. Distribution of PVL(+) and PVL(-) MRSA community- and healthcare-associated PVL types.

Figure 8. Distribution of PVL(+) and PVL(-) MRSA community- and healthcare-associated PVL types.

RESULTS

Table 1. Demographics of patients with community- and healthcare-associated MRSA infections.

Table 2. Detection of MRSA from various strains across Canada.

Table 3. Comparison of antimicrobial resistance rates among community-associated and healthcare-associated MRSA strains.

Table C1. 50th Conference of the Society for Antimicrobial Agents and Chemotherapy.

BACKGROUND

The prevalence of CA-MRSA increased from 17.6% in 2007 to 22.0% in 2009 (p < 0.001). The prevalence of HA-MRSA increased from 7.7% in 2007 to 21.0% in 2009 (p < 0.001).

METHODS AND MATERIALS

The methods and materials used for this study are described in detail in the CANWARD Study Protocol, which is available on the CANWARD website.

RESULTS

The proportion of CA-MRSA strains identified as community-associated was 27.7% (1111/4007) and 13.9% (1111/8007) for HA-MRSA strains.

CONCLUSIONS

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