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Invasive Group A Streptococcal Disease in Long Term Care Facilities in New York State

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Background

Invasive group A streptococcal (I-GAS) infections are reportable in New York State (NYS). Outbreaks of I-GAS are often characterized by high case fatality ratios, and may be propagated by nosocomial transmission by infected or colonized health care workers (HCW). Currently, guidance is lacking for management of I-GAS in long-term care facilities (LTCFs).

Methods

A case of I-GAS is defined as a patient with GAS cultured from a sterile site. All nosocomial reports of I-GAS in NYS LTCFs from January 2001 to October 2007 were reviewed. A data abstraction form was developed to collect facility and patient level characteristics and control measures implemented. Data was obtained from NYSDOH electronic reporting systems and NYSDOH Regional Epidemiology Program outbreak investigation records. Analysis was conducted and results compared to national data.

Results

Of 40 nosocomial reports reviewed, 35 (88%) included at least one invasive case. A total of 52 invasive cases in residents and 26 non-invasive cases in both residents and staff were identified. Of the invasive cases, 33 (63%) were hospitalized and 17 (33%) died. The average time from diagnosis to death was two days. HCW were screened in 17 (49%) of the outbreaks; screening included residents in 6 (35%) of the 17. Pulsed field gel electrophoresis analysis of isolates was used in 17 (49%) of all outbreaks.

Conclusion

I-GAS outbreaks in NYS LTCFs have followed national trends in terms of morbidity and mortality. Assessment of the relative utility of control measures will contribute to the successful management of I-GAS in LTCFs nationwide.