Community-acquired staph pneumonia appears more common, including MRSA

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Preliminary research from the Centers for Disease Control and Prevention (CDC) suggests that community acquired pneumonia (CAP) caused by the Staphylococcus aureus bacterium may be more common than originally suspected, including that caused by antibiotic resistant strains. Researchers report their findings today (March 19) at the 2008 International Conference on Emerging Infectious Diseases in Atlanta, Georgia.

“Over the last few years we have been receiving reports of a severe CAP caused by S. aureus. There are a lot of questions about this disease, but until now there have primarily been case studies which tend to highlight the severest of cases and may present a biased picture,” says Alexander Kallen, a lead researcher on the study.

To get a better perspective on the disease Kallen and his colleagues focused on 3 pediatric hospitals in the Atlanta area during the 2006-2007 influenza season and conducted surveillance for S. aureus CAP. They identified 53 cases, a higher number than they had expected.

“No one really knows what the true incidence of S. aureus CAP is. People suspect that S. aureus causes 3%-5% of all CAP cases, but the number of cases per month we found suggest that these rates of S. aureus CAP might be higher than previously estimated,” says Kallen.

In addition, the data also suggest that the case-fatality rate may be lower than the rate reported in recent case series which have been between 30% and 50%. Kallen’s study reports a case-fatality rate of about 13% which is much lower than previous estimates.

The researchers also looked at antibiotic resistance.

“One thing that concerns us is methicillin-resistant S. aureus (MRSA) increasing in the community,” says Kallen.

As with mortality, they found while the proportion of S. aureus CAP cases caused by MRSA was lower than the case series, it was still significant. Approximately half of the S. aureus CAP cases were caused by MRSA, compared to 70%-80% suggested by recent case series.

“Our study found about half the patients had MRSA, which is not unexpected but quite concerning,” says Kallen.

Even more concerning to Kallen was the fact that close to 40% of the children with MRSA CAP were not given antibiotics that covered the resistant strain.

“The fact that a lot of these kids who had MRSA were not treated with antibiotics that have activity against MRSA suggests that clinicians are not recognizing this organism as a cause of CAP during influenza season,” says Kallen.

Kallen notes that this study is just the first step in a progression towards a better understanding of the patterns of this disease. Much more surveillance is necessary before a clear picture can develop.

Source: American Society for Microbiology

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