Barriers to Intravenous Penicillin Use for Treatment of Nonmeningitis Pneumococcal Disease: Results of an Emerging Infections Network Survey

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ABSTRACT

Of 529 respondents who saw patients with pneumococcal infections (47.2% response rate), 44% were aware of the breakpoint change. The most common methods of learning about the change were IDSA News articles (n=138, 26%) and personal communication with colleagues (n=128, 24%). Respondents reported they do not see patients with pneumococcal infections were excluded from the analysis (N=195).

RESULTS

• Of the 529 respondents, >20% were not aware of the breakpoint change at the time of the survey.

• IDSA News articles are effective methods for increasing awareness of breakpoint changes.

• Awareness among ID physicians about the 2008 penicillin breakpoint change was low.

• Communication via clinical microbiology labs and national conferences are additional preferred methods for increasing awareness of breakpoint changes.

REFERENCES


5. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5750a1.htm.


CONCLUSIONS

• Awareness among ID physicians about the 2008 penicillin breakpoint change was low.

• Communication via clinical microbiology labs and national conferences are additional preferred methods for increasing awareness of breakpoint changes.

• Increased awareness of breakpoint changes alone may be insufficient to increase penicillin use.

Figure 4. Barriers to IV PCN use

1. Most commonly reported barriers to IV penicillin use among ID clinicians were:
   a. frequent penicillin dosing schedule
   b. practice of watching patients for TOI before susceptibility results are available
   c. late dosing schedule
   d. clinical improvement on the initial regimen
   e. convenience of observing empiric regimens

2. Approximately 35% of respondents were more likely to use pericillin as a result of the breakpoint change.

3. 11% of respondents believed that non-ID referring physicians would be more likely to use penicillin as a result of the breakpoint change.

4. Fewer nonmeningitis pneumococcal infections are now categorized as penicillin nonsusceptible.

• Decreased antimicrobial exposure and decreased costs.

• Reduced antimicrobial resistance.

• Avoidance of healthcare-associated infections.

• Reduced costs associated with treatment of pneumococcal disease.

• Achieved penicillin concentrations in the lungs and blood relative to CSF.

• Decreased cost of treatment of pneumococcal disease.

• Decreased antimicrobial resistance.

• Avoidance of healthcare-associated infections.

• Reduced costs associated with treatment of pneumococcal disease.

• Achieved penicillin concentrations in the lungs and blood relative to CSF.