Penicillin-Allergic Women Often Get Wrong Rx

BY KATE JOHNSON

MONTREAL — Pregnant women with group B streptococcal infection and allergy to penicillin frequently receive inappropriate antibiotic therapy despite established guidelines, said Dr. Jennifer Verani, a medical epidemiologist at the Centers for Disease Control and Prevention.

New guidelines will clarify the wording in current CDC guidelines on group B streptococci (GBS) prevention, she said.

Most penicillin-allergic mothers are receiving clindamycin for the treatment of GBS, and very few are getting susceptibility testing done. "However, we and others have found increasing levels of resistance to clindamycin and macrolides in general among GBS isolates," she said at the annual meeting of the Infectious Diseases Society for Obstetrics and Gynecology.

Although 95% of GBS-positive penicillin-allergic mothers received antibiotics, only 16% received the appropriate antibiotic, and only 11% had sensitivity tests performed.

In a separate study presented at the meeting, one hospital significantly improved appropriate antibiotic therapy for penicillin-allergic GBS-positive pregnant women through the implementation of several hospital-based interventions.

Before the interventions, the hospital's 2004-2006 data showed that although 95% of GBS-positive penicillin-allergic mothers received antibiotics, only 16% received the appropriate antibiotic, and only 11% had sensitivity tests performed.

The situation was "clearly far from ideal," said Dr. Agatha Critchfield of the Women and Infants Hospital and Brown University, both in Providence, R.I.

The hospital interventions aimed at improving adherence to the guidelines included provider education through a resident research day, staff meetings, and grand rounds, as well as a change in lab requisition forms that required providers to mark a patient as penicillin allergic, thus prompting the lab to perform sensitivity testing.

A retrospective cohort study following the intervention revealed that the level of appropriate antibiotic therapy increased from 16% to 76%, and sensitivity testing increased from 11% to 79%, Dr. Critchfield reported.

Among the 24% of women who did not receive appropriate antibiotic therapy, 80% received clindamycin and 10% received erythromycin, even though antimicrobial resistance has been increasing in the United States, with up to 15% of GBS isolates being resistant to clindamycin and 25% being resistant to erythromycin, she said.

Overall, however, there was a significant decrease in the use of clindamycin, from 83% before the intervention to 49% after, and an increase in the use of vancomycin, from 6.6% to 29%.

In the upcoming CDC guideline revision, some consideration was given to dropping clindamycin altogether as a recommended antibiotic, Dr. Verani commented. "But people ended up arguing against that because places that do susceptibility testing shouldn't have to lose this as an option," she said. "So we have decided to stick with clindamycin but to have really explicit language with regard to who should get cefazolin, clindamycin, or vancomycin."

The new guidelines are expected to recommend that patients with a high risk or a history of penicillin anaphylaxis, including angioedema, respiratory distress, or urticaria, receive clindamycin if susceptibility tests are available and are positive. If the tests are not performed or results are not yet available, patients should receive vancomycin. Patients at low risk for anaphylaxis, meaning "any other reaction including rashes or simply reporting a history of penicillin allergy," should be getting cefazolin, she said.

"This has been in the guidelines all along, but clearly this is not what people have been doing, so the hope is that by more explicitly putting this wording into the guidelines, we can improve the implementation for [penicillin]-allergic women." ■