

MDS Alert

Research: Beware These Shortfalls in UTI Management

Study author shares concerns about research findings.

Recent research results proved to be "troubling in the sense that antibiotics were initiated in 70 out of 146 [nursing home] patients who didn't meet the McGeer criteria" for treating UTIs, says **David Dosa, MD**, at Brown University, an author of an article on the study published in the Archives of Internal Medicine. (See page 90 for the McGeer criteria incorporated in the F315 survey interpretive guidance.)

Clinicians were also prescribing more broad-spectrum antibiotics than they needed to -- and for longer than existing guidelines recommend, Dosa tells Eli. "The net result," he says: "Patients who received antibiotics (both inappropriately and appropriately) were 8.5 times more likely to develop C. difficile within the three months following antibiotic treatment" than patients who did not receive antibiotic therapy.

"In the study," says Dosa, "we looked at patients who had received a urinalysis during a six-month period in two nursing homes. Essentially, we evaluated patients' charts to look for the appropriateness of antibiotics initiated based on the McGeer criteria."

The researchers didn't identify why nursing facility staff called doctors and nurse practitioners about the patients, Dosa says. "In some cases, the UA may have been ordered by phone and, in other cases, the nurse may have had a talk with the [ordering clinician] in the facility," Dosa says. But he points out that other research has "found that calls at night or during off hours tend to prompt more aggressive treatment."

Review Antibiotic Use

"The most important take-home message is that doctors need to be a little more careful in initiating antibiotics," says Dosa. And they need to select the correct antibiotic, dose, and give the antibiotic for the right amount of time, he adds. "They should also avoid using the top-of-line or broad spectrum antibiotic when that's not the most appropriate" choice. "Oftentimes, we found that despite culture results being available, the physicians didn't change the broad-spectrum antibiotic initiated empirically."

Dosa notes that it's difficult to "make a blanket statement" about which antibiotics to use, as "it depends on the patient's characteristics." He observes, however, that "physicians tend to under-use Bactrim, a tried and true sulfa medication that is actually very effective and fairly narrow in its scope. Physicians tend to avoid it for a number of reasons. People can be allergic to it and it interacts with Coumadin and other medications," he says.

"But for the purposes of this study, we took those factors into consideration," Dosa adds. "And it still seemed that clinicians were starting with more aggressive medications than needed. They also tended to prescribe higher doses than the patients needed based on the patients' creatinine clearance. And in two-thirds of cases, the patients received the antibiotic for a longer duration than was appropriate."

Resource: The study report appeared in Archives of Internal Medicine (2011;171(5):438-443).