Long-Term Care Survey Alert

Infection Control: Make Sure You Cross Your T's, Dot Your I's For Diagnosing UTI

Revised F315 survey guidance gets specific about what counts as infection.

Nursing facilities that miss the boat in diagnosing and treating UTIs could find themselves afloat in F315 and related tags under revised survey guidance.

"F315 guidelines for urinary incontinence/catheters are very clear about the indications to treat a urinary tract infection (UTI), which differ for residents with and without indwelling catheters,"says **Jane Belt, MS, RN, CS**, a consultant with **Plante Moran & Swartz Group** in Columbus, OH. "Nursing facilities, including physicians and medical directors, should be aware of and use these guidelines to avert survey scrutiny," she says.

Know the Golden Rule for Dx

The underlying message of the F315 guidelines: Don't diagnose UTI based on urinalysis and culture alone.

The standard for diagnosing UTI is a combination of genitourinary symptoms and appropriate diagnostic testing, e.g., urinalysis and urine culture, according to **Chesley Richards, MD, MPH,** an infection control specialist with the **Centers for Disease Control & Prevention** and a geriatric practitioner at **Emory University** in Atlanta. (For a rundown of clinical signs of UTI, according to the F315 guidelines, later in this issue.)

Several test results in combination with clinical symptoms, such as fever, new onset of painful urination or flank pain, can help to identify UTIs, according to the revised F315 guidelines. These include:

1. the presence of pyuria (more than minimal white cells in the urine) on microscopic urinalysis;

2. a positive urine dipstick test for leukocyte esterase (indicating significant pyuria) or for nitrites (indicating the presence of Enterobacteriaceae). (A negative leukocyte esterase or the absence of pyuria strongly suggests UTI isn't present, but a positive one alone doesn't prove someone has UTI.)

Follow a Decision-Making Tree for Behavioral Changes

Relying on sudden behavioral changes as a symptom of UTI in residents with dementia has become controversial. "We have come to a point where nursing homes over-diagnose and treat because practitioners too often ascribe any changes in a resident's mental or physical status to an UTI," Richards cautions. "Then they diagnose and treat the patient based on urinalysis and urine culture," he cautions.

The problem: Some patients in a nursing home who are chronically colonized with bacteria have low-grade inflammation and white blood cells in their urine without an active infection, cautions Richards. And 100 percent of people with indwelling catheters will have bacteria in their urine within 30 days, says **James Marx, RN, CIC**, an infection control specialist and principal of **Broad Street Solutions** in San Diego.

So what's a facility's way out of this diagnostic maze? If a patient with cognitive impairment displays sudden changes in behavior or mental status, assess the person not only for UTI but also for other types of infection, advises Richards. "Pneumonia is common, for example, or skin infections related to a pressure ulcer," he notes. "Do a good clinical exam, which sometimes gets overlooked, and obtain a complete blood count, especially if the person is febrile."

Look for a nonverbal response to pain: "If the person can't communicate [their discomfort verbally] ... look for their physical response to [assessment] for costovertebral angle (CVA) tenderness," which is a sign of UTI, advises Richards.

Clinical tip: Consider asking the physician to order an "in and out" catheterization to obtain an uncontaminated specimen in a resident with dementia and behaviors, if obtaining a clean catch proves impossible, advises **Marilyn Mines, RN, BC,** director of clinical services at **FR&R Healthcare Consulting** in Deerfield, IL.

Make Fever the Fork in the Rx Road

Febrile cognitively impaired residents with a positive urine culture and behavioral changes - and no other apparent cause of infection - need antibiotic treatment for UTI, advises Richards. But if the cognitively impaired resident doesn't have a fever, look for noninfectious causes of the behavioral changes, he suggests.

Top of the list: Dehydration. Nurses frequently report the urine has a foul odor although the patient has no localized signs of infection but does have a positive urine culture, says Richards. "But the resident really needs adequate fluids to be rehydrated," he adds. "Then the nursing staff should reexamine the urine, which many times will return to normal character."

Constipation can also cause low-grade fever, abdominal pain and low-grade bladder inflammation if it's severe enough, according to Richards. To assess residents for constipation, the facility needs a baseline assessment at admission of the person's usual bowel elimination pattern (frequency and stool consistency).

Then make sure CNAs monitor the individual resident's bowel movements. If the person normally has a bowel movement every day and has gone three days without one, the CNAs should report that to the nurse and clinician, says Richards.