UTIs IN PREGNANCY: MANAGING URETHRITIS, ASYMPTOMATIC BACTERIURIA, CYSTITIS, AND PYELONEPHRITIS
PATRICK DUFF, MD (JANUARY 2022)

Clarification on UTI issues

Regarding the article on urinary tract infections (UTIs) in pregnancy, I have 3 points of clarification. First, in 27 years of practice in which I universally performed screening urine cultures on prenatal patients plus all of those with symptoms, I have seen a total of 2 cultures with *Staphylococcus saprophyticus*. I see this organism listed in references as a major UTI causative, but is that the case? Second, the clinical case and symptoms discussed are accurate, but costovertebral angle tenderness or fever of 101 °F or higher indicate pyelonephritis and should be treated aggressively. Many of these patients will have nausea and vomiting and will be dehydrated. This decreases urine flow, allowing progressive bacterial growth in renal parenchyma. An initial bolus of intravenous fluids, at least 2 L wide open through a large-bore catheter, rapidly decreases fever, flushes the urinary tract, and improves nausea, headaches, and malaise. Finally, nitrofurantoin is excreted in the urine so rapidly that it does not achieve adequate tissue levels, and it should never be used to treat pyelonephritis or, for that matter, any infection other than uncomplicated cystitis/urethritis.

David Janowitz, MD
Houston, Texas

Dr. Duff responds

I appreciate Dr. Janowitz's interest and thoughtful comments. The patient presented in the case study has acute cystitis, characterized by a low-grade fever, suprapubic pain, dysuria, frequency, and hesitancy. Patients with pyelonephritis typically have a higher fever and significant costovertebral angle pain and tenderness. I agree completely with Dr. Janowitz's observations about the seriousness of pyelonephritis in pregnancy. Pyelonephritis is an important cause of preterm labor, bacteremia, and even septic shock. As I point out in the article, women with moderate to severe kidney infections should be hospitalized and treated with intravenous fluids, antipyretics, antiemetics, and intravenous antibiotics. My usual recommendation is ceftriaxone. Intravenous antibiotics should be continued until the patient has been afebrile and asymptomatic for 24 to 48 hours. Once patients improve, they can be transitioned to oral antibiotics to complete a 10-day course of therapy. Again, I agree with Dr. Janowitz's statement that nitrofurantoin is not an appropriate drug for treatment of pyelonephritis because it does not reach acceptable concentrations in either the blood or the renal parenchyma. Rather, amoxicillin-clavulanate and trimethoprim-sulfamethoxazole are much better choices for oral therapy. However, once the infection is cleared, nitrofurantoin is an excellent agent for suppression of recurrent infection.

Finally, there is no doubt that the principal pathogens that cause UTIs in pregnant women are Escherichia coli, Klebsiella pneumoniae, *and* Proteus *species. However, 3 aerobic Gram-positive cocci do, in fact, cause a small percentage of infections: group B streptococci, enterococci, and* Staphylococcus saprophyticus. *When the latter bacterium is identified as a single organism in high colony count, particularly in a catheterized urine specimen, it should be considered a true pathogen and not simply a contaminant.*

CAN WE RETURN TO THE ABCs OF CRAFTING A MEDICAL RECORD NOTE?
ROBERT L. BARBIERI, MD (OCTOBER 2021)

Another suggestion for reducing note bloat in the EMR

Thank you for picking up a topic that is important for all physicians and one that has been annoying me since the introduction of electronic medical records (EMRs). I like the APSO approach, that works well. My idea for reducing "note bloat" is to eliminate all normal and routine findings and to hide them behind a hyperlink or behind a QR code. This would give you a truly short note and, should you need or want more details, you could always scan the QR code for access to the complete (and bloated) note. I would also recommend hiding all details that do not contribute to the immediate pressing issue at hand (for example, routine depression screening) behind a hyperlink or QR code. The same principle should apply to sending faxes to other physicians' offices. I "love" receiving a chart an inch thick, only to discover that the whole pile of paper could be reduced to a single page of true information. Too few people speak up about this major time and productivity thief. Thank you!

Matthias Muenzer, MD
Rochester, New Hampshire

Dr. Barbieri responds

I thank Dr. Muenzer for his innovative suggestions for improving medical record notes. We spend many hours per week crafting notes in the medical record. Yet, very little attention is given to the development of best practices for improving the value and effectiveness of our notes for our patients and colleagues.