CDC No Longer Recommends Oral Cephalosporins for Gonorrhea

Laurie Barclay, MD

August 10, 2012 — The US Centers for Disease Control and Prevention (CDC) no longer recommends oral cephalosporin treatment for gonococcal infections, according to their updated guidelines, reported in the August 10 issue of theMorbidity and Mortality Weekly Report. The new recommendations update the CDC's 2010 Sexually Transmitted Diseases Treatment Guidelines.

"Infection with [Neisseria] gonorrhoeae is a major cause of pelvic inflammatory disease, ectopic pregnancy, and infertility, and can facilitate HIV transmission," write Carlos del Rio, MD, from the Rollins School of Public Health at Emory University in Atlanta, Georgia, and colleagues. "In the United States, gonorrhea is the second most commonly reported notifiable infection, with >300,000 cases reported during 2011. Gonorrhea treatment has been complicated by the ability ofN. gonorrhoeae to develop resistance to antimicrobials used for treatment."

Urethral isolates of N gonorrhoeae collected in the United States during 2006 through 2011 have shown declining susceptibility to cefixime, according to an analysis of data from the CDC's Gonococcal Isolate Surveillance Project.

Therefore, updated CDC recommendations for treatment of gonorrhea now include the following:

For uncomplicated gonorrhoea of the urogenital tract, rectum, or pharynx, the most reliably effective therapy is a combination regimen of 250 mg intramuscular ceftriaxone and either an oral single dose of azithromycin 1 g or a 7-day course of oral doxycycline 100 mg twice daily.

For first-line therapy of gonococcal infections, the CDC no longer recommends cefixime at any dose.

Patients given cefixime as an alternative agent should be reevaluated in 1 week for a test of cure at the infection site.

Patients with treatment failure, defined as persistent infection after treatment with the recommended combination therapy regimen, should undergo culture of appropriate specimens and antimicrobial susceptibility testing of N gonorrhoeaeisolates using disk diffusion, Etest, or agar dilution. The laboratory should keep the isolate in case further testing is needed.

Within 24 hours of diagnosis, the treating clinician should report cases of treatment failure to the CDC and should obtain treatment advice from an infectious disease specialist, an STD/HIV Prevention Training Center, or the CDC.

Patients with treatment failure should undergo a test of cure 1 week after retreatment.

Patients who have urogenital or rectal gonorrhea but who have severe cephalosporin allergy should receive azithromycin 2 g in a single oral dose plus test of cure in 1 week.

If ceftriaxone is not available, an alternative regimen for uncomplicated gonorrhoea is a single oral dose of 400 mg cefixime plus a single oral dose of azithromycin 1 g or doxycycline 100 mg orally twice daily for 7 days, plus test of cure in 1 week.

Whenever possible, clinicians treating patients with gonorrhea should promptly culture and treat their patient's sex partners from the preceding 60 days. Heterosexual partners who cannot be promptly evaluated and treated may receive expedited partner therapy with oral cefixime 400 mg and azithromycin 1 g delivered to the partner by the patient, a disease investigation specialist, or via a collaborating pharmacy.

"Treatment of patients with gonorrhea with the most effective therapy will limit the transmission of gonorrhea, prevent complications, and likely will slow emergence of resistance," the report authors conclude. "However, resistance to cephalosporins, including ceftriaxone, is expected to emerge. Reinvestment in gonorrhea prevention and control is warranted [and new] treatment options for gonorrhea are urgently needed."

The authors have disclosed no relevant financial relationships.

Morb Motal Wkly Rep. 2012;61:590-594. Full text