

TABLE 181-1 RECOMMENDED TREATMENT FOR GONOCOCCAL INFECTIONS: ADAPTED FROM THE 2010 GUIDELINES OF THE CENTERS FOR DISEASE CONTROL AND PREVENTION

Diagnosis	Treatment of Choice ^a
Uncomplicated gonococcal infection of the cervix, urethra, pharynx ^b , or rectum	
First-line regimen	Ceftriaxone (250 mg IM, single dose) <i>plus</i> Treatment for <i>Chlamydia</i> if chlamydial infection is not ruled out: Azithromycin (1 g PO, single dose) <i>or</i> Doxycycline (100 mg PO bid for 7 days)
Alternative regimens ^c	Cefixime (400 mg PO, single dose) <i>or</i> Ceftizoxime (500 mg IM, single dose) <i>or</i> Cefotaxime (500 mg IM, single dose) <i>or</i> Spectinomycin (2 g IM, single dose) ^{d,e} <i>or</i> Cefotetan (1 g IM, single dose) <i>plus</i> probenecid (1 g PO, single dose) ^d <i>or</i> Cefoxitin (2 g IM, single dose) <i>plus</i> probenecid (1 g PO, single dose) ^d
Epididymitis	See Chap. 163
Pelvic inflammatory disease	See Chap. 163
Gonococcal conjunctivitis in an adult	Ceftriaxone (1 g IM, single dose) ^f
Ophthalmia neonatorum ^g	Ceftriaxone (25–50 mg/kg IV, single dose, not to exceed 125 mg)
Disseminated gonococcal infection ^h	
Initial therapy ⁱ	
Patient tolerant of β-lactam drugs	Ceftriaxone (1 g IM or IV q24h; recommended) <i>or</i> Cefotaxime (1 g IV q8h) <i>or</i> Ceftizoxime (1 g IV q8h)
Patients allergic to β-lactam drugs	Spectinomycin (2 g IM q12h) ^d
Continuation therapy ^j	Cefixime (400 mg PO bid)
Meningitis or endocarditis	See text ^k

^aTrue failure of treatment with a recommended regimen is rare and should prompt an evaluation for reinfection, infection with a drug-resistant strain, or an alternative diagnosis. ^bCeftriaxone is the only agent recommended for treatment of pharyngeal infection. ^cSee text for follow-up of persons with infection who are treated with alternative regimens. ^dSpectinomycin, cefotetan, and cefoxitin, which are alternative agents, currently are unavailable or in short supply in the United States. ^eSpectinomycin may be ineffective for the treatment of pharyngeal gonorrhea. ^fPlus lavage of the infected eye with saline solution (once). ^gProphylactic regimens are discussed in the text. ^hHospitalization is indicated if the diagnosis is uncertain, if the patient has frank arthritis with an effusion, or if the patient cannot be relied on to adhere to treatment. ⁱAll initial regimens should be continued for 24–48 h after clinical improvement begins, at which time the switch may be made to an oral agent (e.g., cefixime or a quinolone) if antimicrobial susceptibility can be documented by culture of the causative organism. If no organism is isolated and the diagnosis is secure, then treatment with ceftriaxone should be continued for at least 1 week. Treatment for chlamydial infection (as above) should be given if this infection has not been ruled out. ^kHospitalization is indicated to exclude suspected meningitis or endocarditis.

PREVENTION AND CONTROL

Condoms, if properly used, provide effective protection against the transmission and acquisition of gonorrhea as well as other infections that are transmitted to and from genital mucosal surfaces. Spermicidal preparations used with a diaphragm or cervical sponges impregnated with nonoxynol 9 offer some protection against gonorrhea and chlamydial infection. However, the frequent use of preparations that contain nonoxynol 9 is associated with mucosal disruption that paradoxically may enhance the risk of HIV infection in the event of exposure. All patients should be instructed to refer sex partners for evaluation and treatment. All sex partners of persons with gonorrhea should be evaluated and treated for *N. gonorrhoeae* and *C. trachomatis* infections if their last contact with the patient took place within 60 days before the onset of symptoms or the diagnosis of infection in the patient. If the patient's last sexual encounter was >60 days before onset of symptoms or diagnosis, the patient's most recent sex partner should be treated. Partner-delivered medications or prescriptions for

medications to treat gonorrhea and chlamydial infection diminish the likelihood of reinfection (or relapse) in the infected patient. In states where it is legal, this approach is an option for partner management. Patients should be instructed to abstain from sexual intercourse until therapy is completed and until they and their sex partners no longer have symptoms. Greater emphasis must be placed on prevention by public health education, individual patient counseling, and behavior modification. Sexually active persons, especially adolescents, should be offered screening for STIs. For male patients, a NAAT on urine or a urethral swab may be used for screening. Preventing the spread of gonorrhea may help reduce the transmission of HIV. No effective vaccine for gonorrhea is yet available, but efforts to test several candidates are under way.

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