CDC 2020 Gonorrhea Treatment Update:
Single 500 mg IM Dose of Ceftriaxone Recommended

This table summarizes the Centers for Disease Control and Prevention (CDC) "Update to CDC's Treatment Guidelines for Gonococcal Infection, 2020" published December 18th, 2020. This guidance updates the 2015 CDC STD Treatment Guidelines and reflects changes expected in the forthcoming CDC 2021 STI Treatment Guidelines.

The new gonorrhea treatment regimens have shifted to monotherapy with a higher dose due to the following reasons:

1. Increasing concern for antimicrobial stewardship and the potential impact of dual therapy on commensal organisms and concurrent pathogens
2. Continued low incidence of gonorrhea isolate strains with ceftriaxone resistance
3. Increased incidence of azithromycin resistance

Disease	Recommended Regimen	Alternative Regimen	Follow-up
Uncomplicated Urogenital and Rectal Gonorrhea (GC)	**Ceftriaxone 500 mg IM for persons weighing <150 kg (330 lb)[1]** **If chlamydia has not been excluded with a negative test result, then treat for chlamydia with doxycycline 100 mg PO BID for 7 days. (*During pregnancy use azithromycin 1 gm orally for chlamydia treatment)***	**Cefixime[2] 800 mg orally OR Gentamicin[3] 240 mg IM PLUS Azithromycin 2 gm orally** **If chlamydia has not been excluded with negative test result, then treat for chlamydia with doxycycline 100 mg PO BID for 7 days. (*During pregnancy use azithromycin 1 gm orally for chlamydia treatment)***	Retest[5] all patients for reinfection 3 months after treatment (even if all sex partners were treated). If retesting[5] at 3 months is not possible, retesting can be performed at any time within 1-12 months after treatment.
Uncomplicated Pharyngeal Gonorrhea (GC)	**Ceftriaxone 500mg IM for persons weighing <150 kg (330 lb)[1]** **If chlamydia coinfection is identified during testing for pharyngeal GC then add treatment for chlamydia with doxycycline 100 mg PO BID for 7 days. (*During pregnancy use azithromycin 1 gm orally for chlamydia treatment)***	No reliable alternative treatments are available. If history of beta-lactam allergy, a thorough assessment of the allergic reaction is recommended.[4] If history of anaphylactic or other severe reaction (e.g., Stevens Johnson syndrome) to ceftriaxone, consult an Infectious Disease specialist or www.STDCCN.org for advice.	A test-of-cure is recommended using culture or nucleic acid amplification test 7–14 days after initial treatment. Retest[5] all patients for reinfection 3 months after treatment (even if all sex partners were treated). If retesting[5] at 3 months is not possible, retesting can be performed at any time within 1-12 months after treatment.

Citation

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1. For persons weighing ≥150 kg (330 lb), 1 g of ceftriaxone should be administered IM.
2. Oral cefixime can be used if administration of ceftriaxone is not available. Cefixime does not provide as high, or as sustained bactericidal levels as ceftriaxone. Cefixime has limited efficacy for pharyngeal infection.
3. If the patient has a cephalosporin allergy, gentamicin plus azithromycin regimen can be used for treatment. Additional doxycycline is not needed for chlamydia coverage since azithromycin is part of this regimen.
4. Information about assessing prior history of allergy is described in the CDC 2015 STD Treatment Guidelines gonorrhea section. (https://www.cdc.gov/std/tg2015/gonorrhea.htm)
5. Retesting assesses for reinfection; reinfection is common within 12 months of diagnosis/treatment for gonorrhea.

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Frequently Asked Questions about the New CDC Gonorrhea (GC) Treatment Guidelines

What dose of ceftriaxone should be used for outpatient treatment of syndromes that previously required 250mg ceftriaxone IM (e.g. pelvic inflammatory disease, epididymitis, and proctitis)?

Ceftriaxone dosage for treatment of these syndromes should be the same dosage that is used for treatment of uncomplicated gonococcal infections: Ceftriaxone 500 mg IM x 1.

My clinic uses lidocaine with ceftriaxone injections. How much lidocaine should we use when administering the increased 500 mg ceftriaxone dose?

For clinics that co-administer 1% lidocaine with ceftriaxone, the dose of lidocaine can be 1.8-2 mL. When using this volume, injection at the ventrogluteal site (rather than the deltoid) is recommended.

Must a test of cure (TOC) be routinely performed after pharyngeal GC treatment?

While the CDC recommends a TOC 7-14 days after treating pharyngeal GC, this may not be feasible in certain jurisdictions. For jurisdictions with sufficient resources, TOC can be considered. If the local laboratory has validated self-collected testing outside of the clinic setting, sending patients home with testing kits and having them returned by mail can reduce the need for patients to return to clinic.

What is the optimal timing if a TOC is performed for pharyngeal GC?

While many infections will be eradicated by 7 days, pharyngeal infections can take longer to be cured than urogenital/rectal infections. Therefore, it is preferable to wait 14 days after treatment for a pharyngeal TOC.

If a TOC is performed earlier than 14 days post-treatment and results are positive, testing should be repeated at 14 days post-treatment. If results are persistently positive, and reinfection has been ruled out, treatment failure should be considered. Specimens for culture and sensitivity testing should be collected and treatment should be administered according to CDPH/CAPTC Guidelines for GC Treatment Failure (https://californiaptc.com/resources/ca-clinical-guidelines-for-gc-treatment-failure/).

Finally, in addition to TOC when indicated, all patients with GC infections at any anatomic site should be rescreened three months after treatment to rule out reinfection.

What about expedited partner therapy (EPT)?

If partners are unable to come to clinic for in person testing and treatment with first line therapy, the updated CDC EPT guidelines now favor cefixime at an increased dose of 800 mg PO x 1 for GC.

If chlamydia (CT) infection has not been excluded, there are two options for EPT (to be given in addition to cefixime 800 mg PO x 1): doxycycline 100 mg PO BID x 7 days OR azithromycin 1g PO x 1

While azithromycin is highly efficacious and comparable to doxycycline for cervical infections, it is inferior for rectal infections. Antibiotic choice for EPT should be based on likelihood of rectal infection and likelihood of compliance with antibiotics.

Some jurisdictions are using azithromycin 1 gram PO x 1 instead of doxycycline for chlamydia EPT in partners for whom pregnancy cannot be ruled out, or whose pregnancy status is unknown.

What treatment can be used for GC EPT if cefixime is not available?

In the setting of a cefixime shortage, cefpodoxime 400 mg orally, Q 12 hours x 2 doses could be used as an alternative.

Should you perform pregnancy testing if doxycycline is being prescribed?

In these cases, patients should be asked about the possibility of pregnancy. If the patient's pregnancy status is unknown, pregnancy testing should be performed prior to prescribing or dispensing doxycycline.

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