

2010 CDC STD Treatment Guidelines

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CDC 2010 STD Treatment Guidelines

Special Populations

- Adolescents
- STD in pregnancy
- HIV
- MSM
- WSW
- **Corrections**

Clinical Prevention Guidance

- High intensity behavioral counseling (USPSTF)
- Pre-exposure vaccination- HAV, HBV, HPV
- Condoms
 - CDC fact sheet; female nitrile condom
- Microbicide trials
 - Trial updates at www.microbicide.org
- Male circumcision may reduce acquisition of some STI (HPV, genital HSV)

Clinical Prevention Guidance

- Preexposure prophylaxis for HIV/STI
 - ART has potential to impact HIV transmission
 - No data PrEP for STD prevention
 - Not in CDC guidelines but Tenofovir vaginal gel found to reduce HIV and HSV acquisition
- Postexposure prophylaxis for HIV/STI
 - genital hygiene methods (douching, washing after sexual exposure) ineffective and may increase risk of BV, some STI, and HIV
- CT, GC rescreening

CAPRISA 004



39% in HIV acquisition over 30 months
 54% reduction in HIV acquisition in those using gel 80%
 51% reduction in HSV-2 acquisition

Quarraisha Abdoool Karim, et al.
 Science 329, 1168 (2010).

Urethritis

- GC (5-20%), CT (15-40%)
- *Mycoplasma genitalium*
 - 15-25% of NGU
- *Trichomonas vaginalis* 5-20% of NGU
- *Ureaplasma urealyticum* (UU)
 - cumulative data insufficient
- CT or MG <5 PMNs (10-30% CT or MG)
- Diagnostic tools not available Rx CT/GC

NGU Treatment

- Current drug regimens are adequate for majority of bacterial NGU
- Azithromycin > doxycycline for *M. genitalium* (82% vs 39%)
- Cost considerations and lack of public health impact data for MG insufficient to demote doxycycline to alternative agent

Mycoplasma genitalium

- Association with acute or persistent NGU
 - No role in male infertility (limited data)
- Conflicting/insufficient evidence for cervicitis, PID, infertility, ectopic pregnancy, adverse birth outcomes
- AZM superior to doxy for MG urethritis
 - Extended duration AZM not superior to single dose
 - In vitro resistance to AZM and doxycycline
- Moxifloxacin for persistent NGU

Recurrent and Persistent Urethritis

- Objective signs of urethritis should be present before initiation of Rx
- *T. vaginalis* culture should be performed using an intraurethral swab or a first-void urine specimen
- **Recommended Regimens**
 - Metronidazole 2 g orally in a single dose
 - OR
 - Timidazole 2 g orally in a single dose
 - PLUS
 - Azithromycin 1 g orally in a single dose (if not used for initial episode)

Epididymitis

- Chronic infectious epididymitis (M tb)
- Ceftriaxone + doxycycline for initial tx
 - quinolone if GC – (cx or NAAT) or infection likely caused by enteric organism
- Ceftriaxone + quinolone
 - Risk for both sexually transmitted and enteric organisms (MSM-insertive anal intercourse)

Cervicitis

- CT/GC NAATs-vaginal, cervical, urine
- Case reports of treatment of cervical ectopy, but no new antimicrobial treatment trial information
- Research is needed on the etiology of persistent cervicitis including the potential role of *Mycoplasma genitalium*

Chlamydia

- Primary focus of screening efforts to detect and prevent complications in women
- Selective male screening- (adolescent clinics, corrections, national job training program, < 30 yrs, STD, military)
- Retest women/men 3 mo post tx
 - CT testing in third trimester (reinfection)

PID

- Some association between MG
 - Insufficient data to support testing/tx MG
- Emergence of QRNG
 - Quinolones not recommended
 - Parenteral tx not feasible- prevalence/individual risk low; naat+ consider azi 2 gm + quinolone+/- metronidazole
- Short term success-ceftriaxone 250 mg IM +azithromycin 1gm qwk x2
- Insufficient evidence to warrant removal of IUD

Gonorrhea

- Screen sexually active women at increased risk <25 years, previous GC or other STIs, new or multiple partners, inconsistent condoms, CSW, drug use (USPSTF)
- No screening in men or women at low risk of infection (USPSTF)
- Retest women/men 3 mo after tx

Gonorrhea

- NAAT sensitivity in genital/non-genital sites superior to culture (variation in NAATs, cross-reaction)
- Co-treatment might hinder the development of antimicrobial resistance
 - GC dual treatment (oral cephalo +azi) may enhance oropharyngeal tx response

GC Treatment Recommendations

- Recommended regimens
 - Ceftriaxone **250 mg IM recommended therapy with co-treatment with Azithromycin 1.0 g PO**
- Alternatives
 - Cefixime 400 mg
 - Cefpodoxime 400 mg
 - Cefuroxime axetil 1 g (marginal)(all the above include Azithromycin 1.0g PO)
 - Azithromycin 2 g (PCN allergy)

Cephalosporin GC Rx Failures

- Oropharyngeal tx ceftriaxone failure ~ 50 (oral)
- Treatment failure or *in vitro* resistance
 - infectious disease consultation
 - culture and susceptibility
 - Rx 250 mg of ceftriaxone IM
 - ensure partner tx
 - report to CDC via state or local public health authorities

Genital, Perianal, Anal Ulcers Evaluation

- History and physical examination often inaccurate
- Majority due to HSV or syphilis
 - Less common chancroid (remove recommendation for testing)
 - noninfectious (yeast, aphthi, fixed drug eruption, psoriasis)
- Serologic test for syphilis
- Diagnostic evaluation for HSV (culture, PCR)
- Treat for dx most likely based on clinical/epidemiology
- Biopsy if uncertain

Syphilis

- Diagnostic considerations
 - No commercially available Tp detection tests
 - Management of treponemal+ RPR –
 - >20 WBC in CSF (HIV+) may improve specificity of NS diagnosis
 - CSF FTA negative predictive value for NS

Syphilis

- No enhanced efficacy of additional BPG or amoxicillin in early syphilis (HIV+/-)
- Failure of RPR to decline 4x in 6-12 mo after 1^o or 2^o may indicate tx failure
- Azithromycin used with caution when BPG or doxycycline not feasible
 - Resistance
 - No use in MSM or pregnancy

Syphilis

- ART may improve clinical outcomes in HIV+
- HIV+ with syphilis of any stage and neurologic sx should undergo CSF exam
- Majority of HIV+ respond standard tx
 - Clinical/CSF abnormalities c/w NS have been shown CD4_≥350 and/or RPR_≥1:32; however if asx, no data that CSF exam associated with improved outcomes

Syphilis in Pregnancy and Congenital Syphilis

- Treponemal screening performed with reflex nontreponemal test
- Oral step-wise pen dose challenge or skin testing may be helpful in identifying women at risk for acute allergy
- Erythromycin or azithromycin does not reliably cure maternal infection or infected fetus
- Insufficient data on ceftriaxone for treatment of maternal infection and prevention of CS

HSV

- IgM testing not useful
- Suppressive antivirals does not abrogate increased risk of HIV acquisition
- Episodic tx- acyclovir/valacyclovir equally effective; famciclovir less effective
- Famciclovir 500 mg x1, 250 mg bid x 2 d episodic
- Acyclovir resistance
- Stronger recommendation for antiviral tx in late pregnancy with sx HSV

Chancroid

- Prevalence in US/worldwide has declined
- No ongoing antimicrobial resistance surveillance as culture not routine
- Primary risk factors for treatment failure are HIV+ and lack of circumcision
- Single dose tx may be less effective in HIV+ (poor response to ceftriaxone)

Lymphogranuloma venereum

- Proctitis presentation among HIV+ MSM
- Diagnosis
 - Genital or lymph node aspirates-culture, DFA, nucleic acid detection (CLIA validation)
 - Genotyping required for determining LGV strains
 - Serology not validated for proctitis presentation
- Empiric Rx for appropriate clinical syndrome
 - Doxycycline 100 mg PO bid x 21 d
 - ?? Azithromycin 1 g PO q wk x 3 wks

Proctitis

- HSV/LGV presumptive tx- painful perianal or mucosal ulceration
- Consider LGV treatment in MSM with anorectal chlamydia and either proctitis (anoscope) with >10 wbcs/high-power field or HIV +

Scabies/Pediculosis

- Permethrin superior to crotamiton
- Combined tx for crusted scabies oral/topical scabicide
- Emerging resistance to all pediculicides except malathion

Bacterial Vaginosis

- BV specific organisms ~antimicrobial resistance
 - Baseline organisms ?risk of failure
- Treatment efficacy differs (Amsel, Gstain)
- Alternative regimen
 - Tinidazole 2 g qd x 3 or 1 g qd x 3
- Management of recurrences
- USPSTF- insufficient evidence to support screening high risk pregnant women; against screening in low risk

Trichomoniasis

- Screening- vaginal dc or high risk
 - Aptima TV analyte specific reagents
 - Consider rescreen women (HIV-/HIV+) at 3 mo
- NAAT preferred diagnostic in men
- Antimicrobial resistance
 - 5-10% estimated prevalence (Ssun 5%)
 - No data to guide tx of male partners of tx failure
 - Metronidazole 500 mg bid x 7 or tinidazole 2 gm
- Interaction HIV~Trichomoniasis
 - Screening at entry into HIV care; rescreen
 - Tx 500 mg bid x 7 days

HPV/Genital Warts

- Counseling messages
 - Oral transmission
- Clarification on use of HPV testing
- GW treatment
 - Sinecatechins ointment (15%) as a patient-applied
 - Vitiligo side effect of imiquimod
- HPV vaccine
 - Emphasis on the difference between bivalent and quadrivalent HPV vaccine for genital wart prevention

Cervical Cancer Screening

- Clarify indication for high risk HPV testing
- HR HPV testing not indicated
 - +/- vaccinate; STD screening for HPV
 - Triage of LSIL
 - Age <21 yr
 - Primary cervical cancer screening only
- Counseling messages
 - Purpose of screening
 - Normal pap/+HR HPV test
 - Disclosure to sex partner
 - Prevention measures- condoms, vaccine

Hepatitis A

- Hepatitis A - international travelers, household/sex contacts, non-household contacts (e.g., play, daycare), IVDA
- Post exposure- hepatitis A vaccine or IG (0.02 mL/kg) based on limited comparative data (no data >40 yr, medical conditions)

Hepatitis B

- Premastication as source of infection
- HBV vaccine should be offered to all unvaccinated persons attending STD clinics and persons seeking STD tx (other settings)
- HBV vaccine (hemodialysis dose) recommended in HIV+ (HIV OI 2009)

Hepatitis C

- Sexual transmission of HCV (syphilis, LGV)
- HCV serology at baseline HIV visit
 - Acute HCV- monitor LFTs
- Unprotected sexual contact may facilitate spread of HCV (semen); barrier precautions discussed

Sexual Assault in Children

- STI screening in children should be independent of symptoms (Giradet et al, *Pediatrics* 2009)
- Diagnostic evaluation
 - CT NAATs (SDA,TMA) on vaginal swabs/urine in girls; + specimens retained for additional testing
 - GC NAATs test dependent; **potential** cross-reaction between other *Neisseria* species/commensals (*N. meningitidis*, *N. sicca*, *N. lactamica*, *N. cinerea*, *Moraxella catarrhalis*)
 - Data insufficient for extragenital NAAT in girls
 - Data insufficient for CT/GC NAATs at any site for boys
 - HPV infection/mode remains controversial

Sexual Assault in Adults

- CT/GC NAATs -any site of penetration/ attempt
- Routine preventive therapy as follow-up poor
- HIV, hepatitis B, syphilis testing individualized
 - Test results likely represent prevalent STIs
 - Some centers have opted to stop STI testing
 - Likely will not impact decision to provide prophylactic Rx
 - Testing costs may be patient's responsibility

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CDC STD Treatment Guidelines

- Authoritative source of STD treatment and management
- Screening, prevention and vaccination strategies, treatment regimens
- Order hard copies
<http://www.cdc.gov/std/treatment>
- Pocket guides, wall charts, slide set
- kgw2@cdc.gov

