National Network of STD Clinical Prevention Training Centers

Florida HEALTH

2018 Updates on STD Management: Practical Approaches to the Most Common STD Clinic Patient Concerns

A Monthly Webinar Series

Webinars occur 12-1 pm EST
One Tuesday per month
January – November 2018

Learner Objectives

At the conclusion of this webinar series, participants should be able to:

- Accurately identify patients at risk for STIs and then test, diagnose, and treat according to CDC STD Treatment Guidelines.

National Network of STD Clinical Prevention Training Centers

Florida HEALTH

Continuing Education Accreditation

This activity has been planned and implemented in accordance with the Essential Areas and the Policies of the Accreditation Council for Continuing Medical Education through the joint providership of the University of Alabama School of Medicine and the Sylvie Ratelle STD/HIV Prevention Training Center.

The University of Alabama School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for participants.

The University of Alabama designates this webinar for a maximum of 1.0 *AMA PRA Category 1 Credit*™. Participants should claim only the credit commensurate with the extent of their participation in the activity.

These credits are also applicable for registered nurses.

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After Today's Webinar

- You will receive an auto-generated email from the National Network of STD Clinical Prevention Training Centers to complete a brief evaluation of today's presentation.
- Within that email, you will find instructions on how to register for and receive CME credits through the University of Alabama School of Medicine.
- Webinars will be archived and available for viewing at www.RatellePTC.org. CME credits will also be available for archived webinars.

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Save The Dates:
2018 STD Webinar Schedule

Date	Title	Speaker(s)	Affiliations
Jan 16	Vaginitis: Bacterial Vaginosis, Yeast Vaginitis, Trichomoniasis	Katherine Hsu, MD, MPH	MDPH/Boston Univ. Med. Ctr.
Feb 20	Cervicitis/PID: Chlamydia, Gonorrhea, *M. genitalium*	Candice McNeil, MD, MPH	Wakeforest Univ.
Mar 20	Motivational Interviewing for STI/HIV Prevention	Thomas Creger, PhD, MPH	Univ. of Alabama at Birmingham
Apr 24	Pregnancy and STIs	Candice McNeil, MD, MPH	Wakeforest Univ.
May 15	Urethritis/Epididymitis/Proctitis: Gonorrhea, *M. genitalium*, and Lymphogranuloma Venereum	Candice McNeil, MD, MPH	Wakeforest Univ.
Jun 19	Clinician-Health Department Partnerships: Partner Management, Disease Reporting, Presumptive Treatment	Marjorie Kirsch, MD	FL DOH Wakulla County

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Save The Dates:
2018 STD Webinar Schedule (cont'd)

Date	Title	Speaker(s)	Affiliations
Jul 17	Genital Lesions: HSV, HPV, Syphilis	Nicholas Van Wagoner, MD, PhD	Univ. of Alabama Sch. of Med.
Aug 21	Management of STI/HIV Coinfection	Katherine Hsu, MD, MPH	MDPH/Boston Univ. Med. Ctr.
Sept 11	Genital Dermatology	Nicholas Van Wagoner, MD, PhD	Univ. of Alabama Sch. of Med.
Oct 16	Approaches with Special Populations: Youth, GLBT	Katherine Hsu, MD, MPH and Nicholas Van Wagoner, MD, PhD	MDPH/Boston Univ. Med. Ctr. and Univ. of Alabama Sch. of Med.
Nov 13	Update on PrEP	Jeffrey Beal, MD	Florida Department of Health/University of South Florida

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Management of STIs in HIV-Infected and At-Risk Patients

Katherine Hsu, MD, MPH*
Director, Ratelle STD/HIV Prevention Training Center
Medical Director, Division of STD Prevention, Mass. Dept. of Pub. Health
Associate Professor of Pediatrics, Boston Univ. Med. Ctr.

August 2018

National Network of STD Clinical Prevention Training Centers

*No commercial disclosures or conflicts of interest

Disclosures

- In the past 12 months, Dr. Hsu has had no relevant financial interests or other relationships with manufacturer(s) of product(s) or provider(s) of service(s) that will be discussed in this presentation
- This presentation will include discussion of pharmaceuticals or devices that have not been approved by the FDA
  - "Off-label" use of extra-genital (rectal and pharyngeal) nucleic acid amplification tests (NAATs) for gonorrhea and chlamydia

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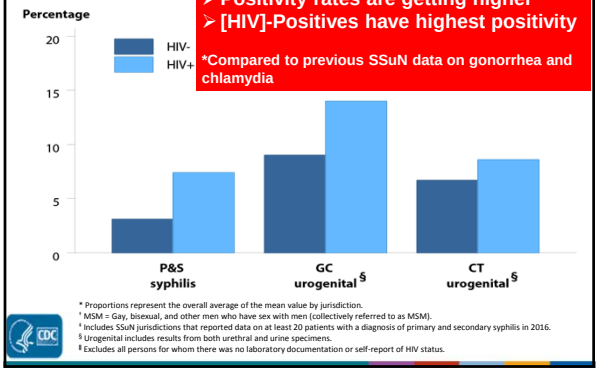
Objectives

- Discuss shifts in STI/HIV epidemiology
  - MSM
  - Women
- Review STI screening and treatment in HIV-infected and at-risk patients
  - Focus upon newer diagnostics
  - Focus upon STIs where treatment or follow-up in HIV-infected patients is *different* than HIV-non-infected patients

Proportion* of MSM† Attending STD Clinics with Primary & Secondary Syphilis‡, Urogenital§ by HIV Status‖, STD Su

- Positivity rates are high in MSM
- Positivity rates are getting higher*
- [HIV]-Positives have highest positivity

*Compared to previous SSuN data on gonorrhea and chlamydia



* Proportions represent the overall average of the mean value by jurisdiction.
† MSM = Gay, bisexual, and other men who have sex with men (collectively referred to as MSM).
‡ Includes SSuN jurisdictions that reported data on at least 20 patients with a diagnosis of primary and secondary syphilis in 2016.
§ Urogenital includes results from both urethral and urine specimens.
‖ Excludes all persons for whom there was no laboratory documentation or self-report of HIV status.

STD/HIV Co-infection Is Common

Ongoing Sexually Transmitted Disease Acquisition and Risk-Taking Behavior Among US HIV-Infected Patients in Primary Care: Implications for Prevention Interventions

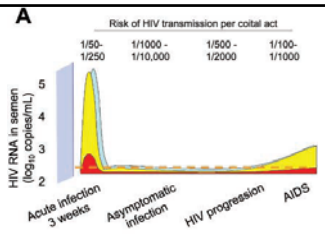
- 557 HIV+ adults in **primary HIV care** in **4 U.S. cities**
- Screened/treated for STD initially and at 6 mths
- 13% with STD at baseline; 7% new STD at 6 mths
  - Other than trichomoniasis (14% women at baseline, 3% women at 6 mths), 94% of incident STDs were in MSM (mostly diagnosed at extragenital sites)
- 20% of all MSM diagnosed with an STD at baseline or by 6 months

Ask Screen Intervene

Mayer, *Sex Transm Dis* 2012

Trichomoniasis and HIV

- HIV-infected women
  - Prevalence of TV infection ranging up to 53% (Cu-Uvin 2002, Miller 2008)
  - Higher incidence of TV compared with HIV-uninfected women (Mullins 2013)
  - Associated with PID (Moodley 2002)
  - Treatment associated with significant decreases in genital tract viral load and vaginal HIV viral shedding (Kissinger 2009, Anderson 2012)



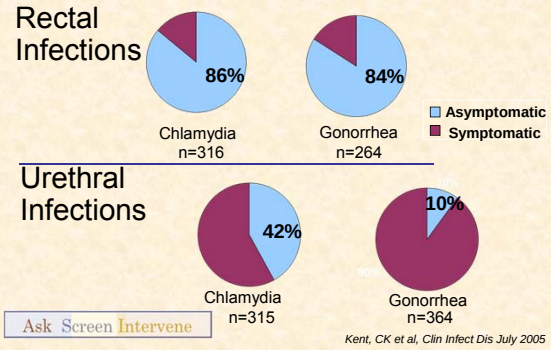
Likelihood of HIV Transmission

Blood HVL ≠ Semen HVL

Cohen & Pilcher. *JID* 191:1391-2, 2005

Why Bother Screening?

Many Infections in MSM are Asymptomatic



Ask Screen Intervene

Kent, CK et al, Clin Infect Dis July 2005

STI Screening in HIV+ Patients:

FIRST VISIT

- **All patients**
  - Ask about STD symptoms
  - Syphilis: serology
  - Chlamydia, Gonorrhea: NAAT
  - Hepatitis A/B/C status
- **Patients who report receptive anal sex**
  - Rectal gonorrhea
  - Rectal chlamydia
- **Patients who report receptive oral sex**
  - Pharyngeal gonorrhea

CDC/HRSA/NIH/IDSA Recommendations

STI Screening in HIV+ Patients:

FIRST VISIT

- **Women**
  - **Chlamydia:** routinely test all sexually active women especially those <25 years
  - **Gonorrhea**: routinely test all sexually active women especially those <25 years
  - **Trichomonas**: NAAT
  - **HPV**: start Pap smear screening within 1 year of sexual debut, but no later than age 21 years
  - **Pregnancy**: ask women of childbearing age if pregnancy suspected or missed periods*

***Identify possible current pregnancy, interest in future pregnancy, or sexual activity without reliable contraception**

CDC/HRSA/NIH/IDSA Recommendations

STI Screening in HIV+ Patients:

SUBSEQUENT VISITS

- Periodic retesting for all sexually active patients
- Annually for all, more frequent (**every 3-6 months**) depending on risk:
  - Multiple or anonymous sex partners
  - Unprotected vaginal or anal intercourse with partner with negative or unknown HIV status
  - Sex or needle-sharing partner with above risks
  - "Life changes" associated with increased risk
  - Because re-infection rates are high, patients with chlamydia, gonorrhea, or trichomoniasis should be re-tested 3 months after treatment

CDC/HRSA/NIH/IDSA Recommendations

STI DIAGNOSTIC TESTING

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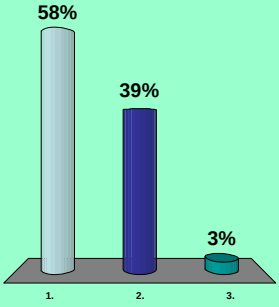
Tests Recommended for STI Screening – Part 1: Syphilis, Trichomonas, HPV, HSV

STI	TEST	COMMENT
Syphilis	Serology with nontreponemal tests (RPR or VDRL) or treponemal EIA	Confirm positive result with serum treponemal test (FTA-ABS, TPPA)
Trichomonas	NAAT preferred; culture, antigen detection test, or saline microscopy of vaginal fluid remain options	NAAT now commercially available
HPV	Pap smear; Pap smear and HPV co-testing if ≥30 years	Results govern re-screening frequency
Genital herpes	Consider type-specific serology	Genital herpes increases genital HIV shedding

CDC/HRSA/NIH/IDSA Recommendations

What is your usual first-line screening test for syphilis?

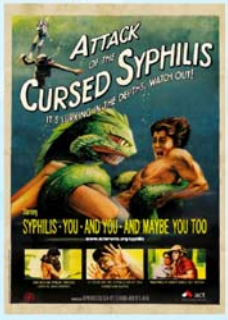
1. RPR
2. Syphilis EIA
3. Not sure



Syphilis Serology

Nontreponemal: VDRL & RPR
- Antibody to cardiolipin-lecithin-cholesterol antigen; not specific to *T. pallidum*
- Quantitative: titer measured
- Used to follow treatment response (always use same test)

Treponemal: TP-PA, FTA-ABS, EIA/CIA
- Qualitative
- Confirmatory



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Marrazzo, CDC-NNPTC Webinar: Sexual Health in MSM, June 7, 2012

Syphilis Screening Paradigm

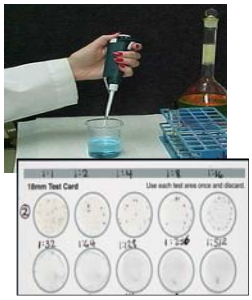
EMERGING NEW…

Treponemal tests (e.g., EIA, CIA, MBIA)
- SPECIFIC TO *TP*
- QUALITATIVE
- REACTIVITY PERSISTS OVER LIFETIME
- REACTIVITY DECLINES WITH TIME

reflex to

Non-treponemal tests (e.g., RPR, VDRL)
- NON-SPECIFIC ANTIBODY TO LIPOIDAL ANTIGENS
- QUANTITATIVE
- REACTIVITY DECLINES WITH TIME

Why switch to EIA/CIA?



180 tests per hour, no manual pipetting

Newer Treponemal Screening Tests

- Enzyme immunoassays (EIA)
  - Trep-Sure IgM/IgG, CAPTIA Syphilis G (Trinity Biotech) – wild type treponemal antigens
- Chemiluminescence immunoassays (CIA)
  - LIAISON IgM/IgG (Diasorin) – recombinant TpN17
- Microbead immunoassays (MBIA)
  - BioPlex 2200 Syphilis IgM and IgG (BioRad) – recombinant TpN15, TpN17, TpN47
  - AtheNA Multi-Lyte T. pallidum IgG (Zeus Scientific) – recombinant *T. pallidum* antigen p17kDa

Sena at al., CID 2010

Which algorithm?

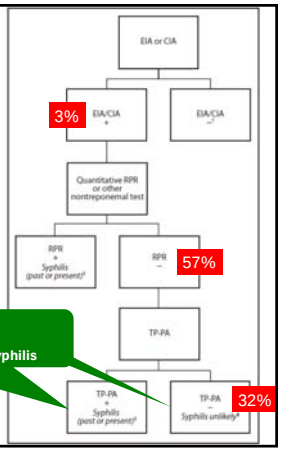
- Traditional algorithm
  - Detects active infection
  - High rate of biologic false positives
    - Confirmation with treponemal test
      - Use of both tests results in a high positive predictive value
  - Can miss early primary and treated infection
- Reverse sequence algorithm
  - Detects early primary and treated infection that might be missed with traditional screening
  - Nontreponemal test needed to detect active infection
  - Ideally, EIAs and CIAs should have perfect specificity
    - EIAs and CIAs are nonspecific
    - High rate of false positive results
    - Varies by risk of population

CDC-Recommended Algorithm for Reverse Sequence Syphilis Screening

Radolf JD et al. ***MMWR***, 2011

Probable false positive EIA
•If high risk: repeat RPR in several weeks

Assess for hx of treated syphilis, sx/signs
•If treated, no further action
•If untreated, consider tx for latent syphilis



CDC Recommendations

•All reactive EIA/CIAs should be reflexed to a quantitative non-treponemal test (e.g. RPR, VDRL)
- •Confirm reactive EIA/CIA
- •Detect active infection

•Discordant specimens (e.g. EIA+/RPR-) should be confirmed with a 2nd treponemal test

•Confirmatory treponemal test should ideally be similarly sensitive and more specific than EIA/CIA
- •TP-PA recommended
- •FTA-ABS test not recommended (lower specificity than other treponemal tests and probably lower sensitivity; also requires trained personnel and a dedicated fluorescence microscope)

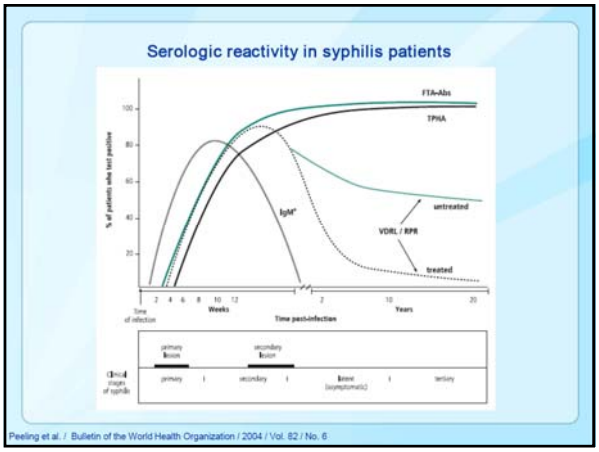
•Results of all 3 tests (EIA, RPR, TP-PA) should be reported simultaneously to provider

MMWR / February 11, 2011 / Vol. 60 / No. 5

Causes of False Positive Syphilis Testing

- **Non-treponemal tests**
  - Viral infections
    - Infectious mononucleosis
    - Hepatitis
    - Varicella
    - Measles
  - Lymphoma
  - TB
  - Malaria
  - Endocarditis
  - Connective tissue disease
  - Pregnancy
  - Abuse of injection drugs
- **Treponemal tests**
  - Other spirochetal illnesses (e.g. Lyme, leptospirosis, rat-bite fever, relapsing fever, yaws, pinta)
  - **<u>But note, VDRL is non-reactive in Lyme!!!</u>**

AAP Red Book, 2015



Trichomoniasis: Diagnosis

Nucleic Acid Amplification Tests
(Vaginal swab +/- other samples)
- AmpliVue (Quidel)
- APTIMA (Hologic)
- MAX, ProbeTec Q^{x} (BD)
- Solana (Quidel)
- Xpert (Cepheid)

Sens/Spec :**88-100%,** 97-99.9%

Point-of-care tests
- OSOM trichomonas rapid antigen test (Genzyme)
- Affirm VP III (BD)

OSOM **Sens**/Spec: **67-100%,** 92-100%
Affirm VP **Sens**/Spec: **89-93 %,** ~100%

Saline Wet Mount
- Motile trichomonads
- pH >4.5
- Whiff test may be +

Sens/Spec: **36-70**%, ~100%

Culture
- Diamond's
- InPouch TV, BioMed Diagnostics

Sens/Spec: **75-95%,** 100%

Miller & Nyirjesy, Curr Infect Dis Rep 2011
Schwebke, JCM 2011
APHL. Advances in Laboratory Detection of T. Vaginalis (Updated) 2016

Newer Testing Options for Trich

- Microscopy is inferior to new options, including
  - Rapid antigen testing (OSOM)
  - Nucleic acid amplification testing
    - APTIMA TMA *Trichomonas vaginalis* assay
    - BD ProbeTec TV Q^x Amplified DNA assay
    - May use same specimen types as used with gc/chl NAATs (i.e. vaginal swab, endocervical swab, urine)

Huppert CID 2007

Test	Sens	Spec
APTIMA TMA	98%	98%
OSOM	90%	100%
Culture	83%	100%
Wet prep	56%	100%

Table 3. Differences in test sensitivity stratified by the presence or absence of vaginal symptoms.

Test method	Sensitivity, % (95% CI) All patients (*n* = 330)	Vaginal symptoms present (*n* = 210)	Vaginal symptoms absent (*n* = 120)
Wet mount	50.8 (37.7–63.9)	57.5 (40.9–72.9)	38.1 (18.1–61.5)
Culture	75.4 (62.7–85.5)	77.5 (61.5–89.1)	71.4 (47.8–88.7)
Rapid test	82.6 (76.9–90.8)	92.3 (79.8–98.4)	61.9 (38.4–81.9)
TMA	98.4 (91.2–99.9)	97.5 (86.9–99.9)	100 (83.8–100)

NOTE. The comparator was any test result positive for *Trichomonas vaginalis* infection. TMA, transcription-mediated amplification.

Slide courtesy of Marrazzo, IDSA 2011

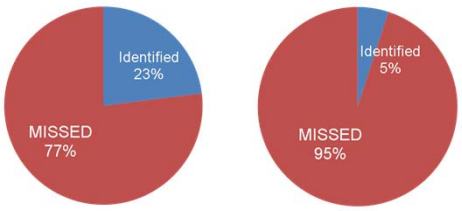
Tests Recommended for STI Screening – Part 2: Gonorrhea and Chlamydia

GENDER	TEST	COMMENT
Women	➢ NAAT -- vaginal swab preferred, provider or patient collected	➢ NAAT includes PCR, SDA, TMA; most sensitive tests (>90% vs. 70%)
Men	➢ NAAT – urine preferred	➢ For NAAT, collect first 15-30 cc of urine stream without cleansing urethral meatus
Both	➢ NAAT -- rectal (for gc/chl) or pharyngeal swab (for gc only) preferred*, provider or patient collected	➢ Depends on reported sexual exposure at these sites

***Though not FDA-approved for these samples, now generally available through validated assays.**

CDC/APHL Recommendations

Proportion of CT and GC infections MISSED among 3398 asymptomatic MSM if screening only urine/urethral sites, San Francisco, 2008-2009

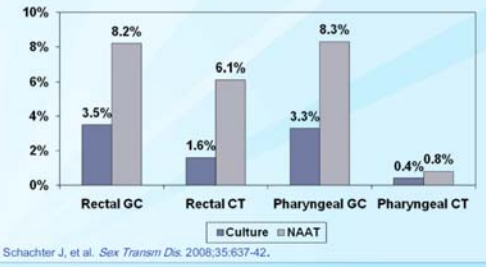


Chlamydia **Gonorrhea**

Marcus et al, STD Oct 2011; 38: 922-4

NAAT Testing, Extragenital Sites

- Not FDA-cleared for rectal or pharyngeal specimens, but preferred over culture



Schachter J, et al. *Sex Transm Dis.* 2008;35:637-42.

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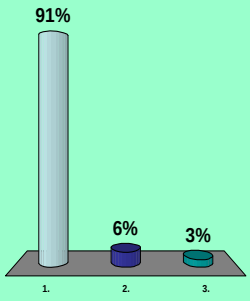
Marrazzo, CDC-NNPTC Webinar: Sexual Health in MSM, June 7, 2012

Do you have access to rectal/ pharyngeal NAAT for gc/chl?

1. Yes
2. No
3. Not sure



Chlamydia and Gonorrhea Nucleic Acid Amplification Testing

…still *not* FDA-cleared for rectal or pharyngeal specimens but now the preferred testing method over culture

But …

- Validation procedures can be done by labs to allow use of a non-FDA-cleared test or application
  - Test panel of known positive & negative samples against the cleared test technology to demonstrate good performance
- Many public health laboratories and at least two national commercial labs currently provide gc/chl NAAT for rectal/pharyngeal specimens
  - Quest, LabCorp, Mayo commercial labs all offer

Don't forget the q3mth "triple dip" for at-risk MSM

- HIV/Syphilis/ HepC* Serologies
- Pharyngeal GC NAAT**
- Urine GC/CT NAAT
- Rectal GC/CT NAAT**

*In HIV-coinfected individuals, screen hep C at least annually

**Off-label use - not FDA-approved for testing at extragenital sites, but many reference labs have validated the assay for use

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STI TREATMENT

National Network of STD Clinical Prevention Training Centers

Treatment of STI in HIV-infected persons

- CDC STD Treatment Guidelines highlight specific regimens for HIV-infected persons when appropriate
- In general, treatment guidelines are similar between HIV-infected and non-infected patients
  - Bacterial STIs: no treatment differences
  - Viral/protozoan STIs: treat with higher doses and/or longer

www.cdc.gov/std/treatment

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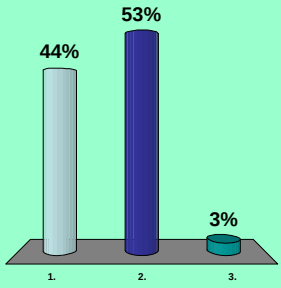
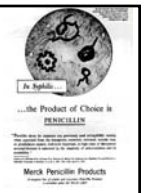
18 yo HIV-infected MSM well-controlled on ART, with rash of secondary syphilis. What treatment regimen do you recommend?

✔1. 2.4 MU IM benzathine pcn G x 1 dose
2. 2.4 MU IM benzathine pcn G x 3 doses
3. Other



SYPHILIS - TREATMENT



PENICILLIN

Primary, secondary and early latent syphilis
Benzathine PCN 2.4 million units IM x 1 dose
(Jarisch-Herxheimer reaction can occur during tx of secondary syphilis)

PCN allergy – If compliance can't be assured, desensitize, treat with PCN (instructions in 2010 STD Treatment guidelines)
- Doxycycline or tetracycline for 14 days
- Ceftriaxone 1 g daily for 10-14 days
- Azithromycin 2 g, one dose (but failures/resistance reported – therefore do not use with MSM or pregnant women)

Late latent disease
Benzathine PCN 2.4 million units IM once a week x 3 doses

Neurologic/ocular syphilis
LP, ocular slit-lamp exam, and formal ophthal/otologic eval indicated if related clinical symptoms exist (cognitive dysfunction, motor or sensory deficits, opthal or auditory symptoms, cranial nerve palsies, or meningitis)
Aqueous crystalline penicillin G 18–24 million units per day for 10–14 days
Consider benzathine PCN 2.4 million units IM once a week for up to 3 weeks as chaser

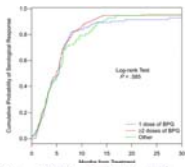
Follow titers q3 mths for a year

1. Syphilis in HIV: **PCN**

- Examination of efficacy of single dose 2.4 MU IM benzathine pcn G (BPG) in U.S. Military HIV Natural History Study
  - Retrospective case review , 1986-2013
  - 350 subjects (99% male) contributed 478 cases of early syphilis (documented new positive non-treponemal test in previous year)
  - HIV well-controlled in most patients (majority on HAART, median CD4 = 494, with low viral loads)
  - 151 cases treated with single dose BPG; others treated with more BPG

- Findings
  - Older age associated with delayed response to treatment
  - Higher pretreatment titers and higher CD4 count associated with faster response to treatment

Ganesan et al., CID 2015



Serologic Response	Total (N = 478)	1 Dose of BPG[a] (n = 141)	≥2 Doses of BPG[a] (n = 252)	Other[a] (n = 85)
Serologic response[b]				
3 mo	31%	33%	29%	33%
6 mo	66%	69%	66%	60%
9 mo	84%	86%	85%	80%
12 mo	91%	92%	92%	86%
18 mo	96%	94%	96%	96%
24 mo	97%	96%	97%	96%
Seroconversions[c]				
3 mo	5%	8%	4%	4%
6 mo	21%	28%	18%	15%
9 mo	35%	43%	32%	28%
12 mo	46%	56%	44%	34%
18 mo	63%	68%	63%	54%
24 mo	67%	73%	57%	60%

Abbreviations: BPG, benzathine penicillin G; HIV, human immunodeficiency virus.

[a] The results displayed refer to 3 different regimens, namely, 1 dose of BPG, ≥2 doses of BPG, or an "other regimen."

[b] Proportion of subjects who exhibited response to therapy defined as a ≥4-fold decline in nontreponemal titer.

[c] Proportion of subjects who seroreverted following therapy (ie, a negative nontreponemal titer following therapy).

2. Syphilis in HIV: **Non-penicillin**

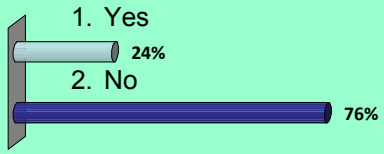
- Doxycycline 100 mg PO bid x 14 days
  - Early syphilis: 20 total cases across literature
    - Impossible to draw substantive conclusions
- Azithromycin 2 g PO x 1 or 2 doses
  - Few data in HIV-infected
  - Most trials pre-date emergence of azithromycin resistance which is increasing and more commonly found in MSM
    - single A to G mutation, position 2058 of 23S rRNA gene of *T. pallidum*
- Ceftriaxone 1-2 g IM or IV daily for 10-21 days
  - Neurosyphilis: 19 total cases across literature, plus 1 new obs. study adding 12 patients (Spornraft-Ragaller et al., Eur J Med Res 2011)
  - More promising – few serologic failures at 12-24 mths

Blank et al., STI 2011
Spornraft-Ragaller et al., Eur J Med Res 2011

SYPHILIS – FOLLOW-UP IN HIV+

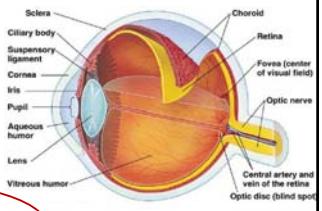
- **Quantitative non-treponemal serologic tests should be repeated MORE FREQUENTLY**
  - **3**, 6, **9**, 12, and 24 months after primary and secondary syphilis
  - 6, 12, **18**, and 24 months after latent syphilis
- Neurosyphilis - LP should be repeated q6mths if CSF pleiocytosis was present initially, until cell count normalizes
  - If not decreased after 6 mths or if CSF not normal after 2 yrs, re-tx should be considered
  - Changes in CSF-VDRL or CSF protein occur more slowly, persistent abnormalities may be less clinically important
- Re-treat for syphilis (and re-consider neurosyphilis) if
  - Titers increase four-fold during this time
  - Titer fails to decline at least 4-fold within 6-12 months of tx for early syphilis, or 12-24 months of tx for late syphilis
  - New signs or symptoms of syphilis appear

Have you consulted on a case of ocular syphilis within the past year?



Ocular Syphilis

Manifestations:
- Conjunctivitis, scleritis, and episcleritis
- **Uveitis**: anterior and/or posterior
- Elevated intraocular pressure
- **Chorioretinitis**, retinitis
- Vasculitis



Symptoms:
- Redness
- Eye pain
- Floaters
- Flashing lights
- Visual acuity loss
- Blindness

Diagnosis:
- Ophthalmologic exam
- Serologies: RPR (if negative, rule out prozone, VDRL, treponemal tests
- Lumbar puncture

Slide courtesy of Sarah Lewis, MD

Wender, JD et al. How to Recognize Ocular Syphilis. Review of Ophthalmology. 2008.

CDC April 2015 Clinical Advisory: Ocular Syphilis Alert- CA, WA, other states

- **24 cases, majority HIV-infected MSM**
  - Few HIV-uninfected men and women
  - Significant sequelae including blindness, despite treatment
- **Be aware of ocular syphilis:**
  - **Symptoms may include:** loss of vision, floaters, a blue tinge in vision, flashing lights and blurring of vision
- **Careful neurologic exam in syphilis patients**
- **Patients with syphilis and ocular complaints need immediate ophthalmologic evaluation!!!**
- **LP should be performed in patients with syphilis and ocular complaints**
- Prior research has documented neuropathogenic strains
  - ?unknown if oculo-tropic strain role in these cases

http://www.cdc.gov/std/syphilis/clinicaladvisoryos2015.htm

Ocular Syphilis: Ongoing Questions and Challenges

- More than 200 cases have been reported from over 20 states
- Lack of clarity whether this represents:
  - outbreak of a more neuro/ocular-tropic syphilis strain *versus*
  - increased awareness of a known complication of syphilis in the setting of rising number of syphilis cases
- Limitations of current surveillance system to detect/record ocular syphilis cases

Trichomoniasis Treatment

- Recommended regimens
  - Metronidazole 2 g PO x 1 dose OR
  - Tinidazole 2 g PO x 1 dose

Safe at all stages of pregnancy
Avoid EtOH x 24 hrs after tx
If breastfeeding, consult guidelines

Pregnancy Category C, do NOT use!
Avoid EtOH x 72 hrs after tx
If breastfeeding, consult guidelines

- Alternative regimen
  - Metronidazole 500 mg PO bid x 7 days
- Pregnancy:
  - Metronidazole 2 g orally in a single dose
    - No evidence of teratogenicity (pregnancy category B)
    - Tinidazole pregnancy category C, not recommended
- **HIV-infected**
  - **Metronidazole 500 mg PO bid x 7 days**
    - **More effective than single-dose therapy**

2015 CDC STD Treatment Guidelines

Trichomonas Treatment in HIV

- 270 women enrolled (New Orleans, Houston, Jackson; HIV-infected, positive for TV by culture)
- Randomized to either MTZ 2 g PO x 1 or 500 mg PO bid x 7 days
  - 255 women evaluated for test of cure (~1 mth)
  - 152 women negative or didn't return at TOC were eval. at ~3 mths

	TV+ rate overall, %	7-day dose, %	Single dose, %	RR (95% CI)	P
TOC visit (~1 mth)	12.5	8.5	16.8	0.50 (0.25, 1.00)	0.045
3 month visit	17.8	11.0	24.1	0.46 (0.21, 0.98)	0.03

- Secondary analysis: lack of single dose treatment efficacy found only among women with asymptomatic BV

Kissinger et al., *JAIDS* 2010

Treatment: First Clinical HSV Episode

- Acyclovir 400 mg PO tid
- Acyclovir 200 mg PO 5x per day
- Valacyclovir* 1 g PO bid
- Famciclovir** 250 mg PO tid

for 7-10 days or until clinical resolution

*not licensed for pre-pubertal
**not licensed for <18 yrs

Treatment: Episodic Recurrent HSV

- Acyclovir 400 mg PO tid
- ~~Acyclovir 800 mg PO bid~~
- Valacyclovir* 1 g PO ~~qd~~ **bid**
- Famciclovir** ~~125 mg~~ **500 mg** PO bid

all for 5 – 10 days, OR

- ~~Valacyclovir* 500 mg PO bid for 3 days~~, OR
- ~~Acyclovir 800 mg PO tid for 2 days~~, OR
- ~~Famciclovir** 1 g PO bid for 1 day~~
- ~~Famciclovir** 500 mg PO x 1 dose, then 250 mg PO bid x 2 days~~

Short course therapy not advised for HIV-infected

Start during prodrome or within 1 day of lesion onset

*not licensed for pre-pubertal
**not licensed for <18 yrs

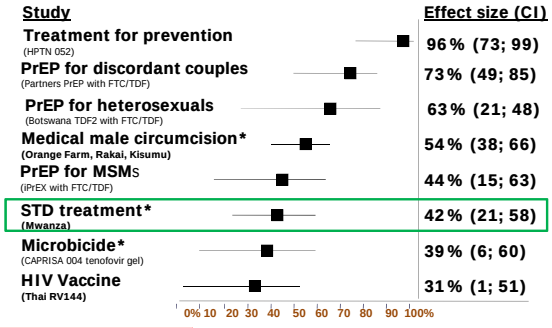
Treatment: Daily Suppressive HSV Therapy

- Efficacious in decreasing clinical manifestations of HSV in HIV-infected persons
- **Regimens for persons with HIV**
  - **Acyclovir 400 - 800 mg PO bid to tid**
  - **Valacyclovir* 500 mg PO bid**
  - **Famciclovir** 500 mg PO bid**

Discuss need to continue therapy annually with patient

*not licensed for pre-pubertal
**not licensed for <18 yrs

RCT evidence for preventing sexual HIV transmission

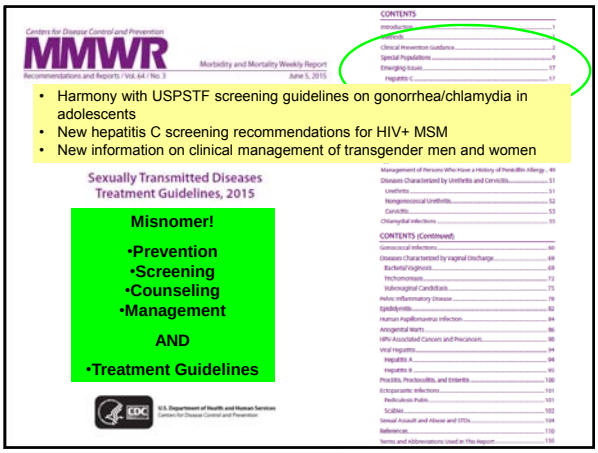


Abdool Karim SS & Q. Antiretroviral prophylaxis...*Lancet* 2011;378:e23-5

Slide courtesy of Ken Mayer, 2012

Conclusions

- Shifts have occurred in STI epidemiology
  - syphilis ↑ and HIV ↑ in MSM in the last decade
- Routine, FREQUENT STI screening and treatment in HIV-infected patients is critical
  - individual patient benefit
  - reduction of HIV transmission and acquisition: this is part of HIV prevention!



CDC STD Treatment Guidelines Development

- Evidence-based on principal outcomes of STD therapy
  1. Microbiologic eradication
  2. Alleviation of signs & sx
  3. Prevention of sequelae
  4. Prevention of transmission
- Recommended regimens preferred over alternative regimens
- Alphabetized unless there is a priority of choice
- Reviewed April 2013; published 2015
- www.cdc.gov/std/treatment
  - Pocket guides, teaching slides, charts, app

Language in yellow highlighted boxes reflects changes between 2010 and 2015 guidelines

National Network of STD Clinical Prevention Training Centers

Want to know more about STDs?
There's an app for that.

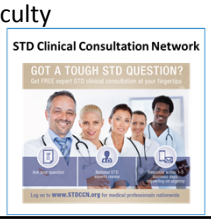
CDC STD Treatment Guidelines App for Apple and Android

Available now, **FREE!** (accept no competitors)

Search "STD Treatment" in App store

STD Clinical Consultation Network STDCCN – NEW!!!

- Provides STD clinical consultation services within 1-5 business days, depending on urgency, to healthcare providers nationally
- Your consultation request is linked to your regional PTC's STD expert faculty
- Just a click away!
- www.STDCCN.org



National Network of STD Clinical Prevention Training Centers

National STD Curriculum

www.std.uw.edu

The *National STD Curriculum* integrates the most recent CDC STD Treatment Guidelines into a free, up-to-date, educational website. The site addresses the epidemiology, pathogenesis, clinical manifestations, diagnosis, management, and prevention of STDs.

- **Seven Self-Study Modules**
- **Twelve Question Bank topics with 100+ interactive board-review style questions**
- **Modular learning in any order with progress tracker**
- **Group registration and tracking for staff, students, and health care organizations**
- **FREE CME and CNE credits**

National Network of STD Clinical Prevention Training Centers

This curriculum was funded by a grant from the CDC and developed by the National Network of STD Clinical Prevention Training Centers

National Network of STD Clinical Prevention Training Centers

Florida HEALTH

2018 Updates on STD Management: Practical Approaches to the Most Common STD Clinic Patient Concerns

A Monthly Webinar Series

Webinars occur 12-1 pm EST
One Tuesday per month
January – November 2018

Learner Objectives

At the conclusion of this webinar series, participants should be able to:

- Accurately identify patients at risk for STIs and then test, diagnose, and treat according to CDC STD Treatment Guidelines.

Continuing Education Accreditation

This activity has been planned and implemented in accordance with the Essential Areas and the Policies of the Accreditation Council for Continuing Medical Education through the joint providership of the University of Alabama School of Medicine and the Sylvie Ratelle STD/HIV Prevention Training Center.

The University of Alabama School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for participants.

The University of Alabama designates this webinar for a maximum of 1.0 *AMA PRA Category 1 Credit*™. Participants should claim only the credit commensurate with the extent of their participation in the activity.

These credits are also applicable for registered nurses.

After Today's Webinar

- You will receive an auto-generated email from the National Network of STD Clinical Prevention Training Centers to complete a brief evaluation of today's presentation.
- Within that email, you will find instructions on how to register for and receive CME credits through the University of Alabama School of Medicine.
- Webinars will be archived and available for viewing at www.RatellePTC.org. CME credits will also be available for archived webinars.

Save The Dates:
2018 STD Webinar Schedule

Date	Title	Speaker(s)	Affiliations
Jan 16	Vaginitis: Bacterial Vaginosis, Yeast Vaginitis, Trichomoniasis	Katherine Hsu, MD, MPH	MDPH/Boston Univ. Med. Ctr.
Feb 20	Cervicitis/PID: Chlamydia, Gonorrhea, *M. genitalium*	Candice McNeil, MD, MPH	Wakeforest Univ.
Mar 20	Motivational Interviewing for STI/HIV Prevention	Thomas Creger, PhD, MPH	Univ. of Alabama at Birmingham
Apr 24	Pregnancy and STIs	Candice McNeil, MD, MPH	Wakeforest Univ.
May 15	Urethritis/Epididymitis/Proctitis: Gonorrhea, *M. genitalium*, and Lymphogranuloma Venereum	Candice McNeil, MD, MPH	Wakeforest Univ.
Jun 19	Clinician-Health Department Partnerships: Partner Management, Disease Reporting, Presumptive Treatment	Marjorie Kirsch, MD	FL DOH Wakulla County

National Network of STD Clinical Prevention Training Centers

Save The Dates:
2018 STD Webinar Schedule (cont'd)

Date	Title	Speaker(s)	Affiliations
Jul 17	Genital Lesions: HSV, HPV, Syphilis	Nicholas Van Wagoner, MD, PhD	Univ. of Alabama Sch. of Med.
Aug 21	Management of STI/HIV Coinfection	Katherine Hsu, MD, MPH	MDPH/Boston Univ. Med. Ctr.
Sept 11	Genital Dermatology	Nicholas Van Wagoner, MD, PhD	Univ. of Alabama Sch. of Med.
Oct 16	Approaches with Special Populations: Youth, GLBT	Katherine Hsu, MD, MPH and Nicholas Van Wagoner, MD, PhD	MDPH/Boston Univ. Med. Ctr. and Univ. of Alabama Sch. of Med.
Nov 13	Update on PrEP	Jeffrey Beal, MD	Florida Department of Health/University of South Florida

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