



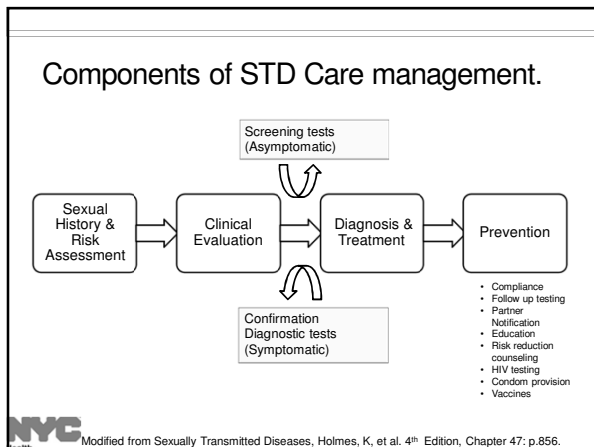
CLINICAL MANAGEMENT OF STDS

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STD/HIV Update Conference
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Outline

- Essential components of STD care management
 - Sexual History
 - Risk Assessment
 - Clinical evaluation
 - Diagnosis and Treatment
 - Partner management
 - Prevention Education/Counseling
- STD Cases

The Importance of a Comprehensive Sexual History

- Establish patient's STD/HIV risk
- Guides Physical exam
- Guides screening activities
- Clarify partner management issues
- Establish patient's pregnancy risk and contraceptive needs
- Provide relevant risk reduction counseling




Risk Assessment

The (Five) Ps

- Partners
- Practices
- Protection
- Pregnancy
- Past History of STIs

Know your community disease prevalence.


www.cdc.gov/std/treatment



Clinical Evaluation

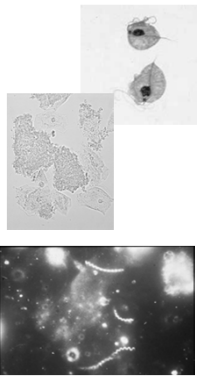
<ul style="list-style-type: none"> • Males • Skin (all exposed areas) • Mouth/Throat • External Genitalia <ul style="list-style-type: none"> • Circumcision status • Urethral meatus • Genital lesions • Testicular/scrotal palpation • Lymphadenopathy • Ano-rectal 	<ul style="list-style-type: none"> • Females • Skin (all exposed areas) • Mouth/Throat • External Genitalia <ul style="list-style-type: none"> • Vulva, Labia, introitus, perineum • Genital Lesions • Vagina and vaginal secretions • Pelvic exam <ul style="list-style-type: none"> • Cervix • Bimanual exam • Lymphadenopathy • Ano-rectal
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Color Atlas & Synopsis of Sexually Transmitted Diseases. 3rd Edition. Handsfield, H. Hunter, 2011.



Diagnostic Tests


- **Microscopy and Rapid tests**
 - Gram stain
 - Vaginal fluid tests
 - Wet-mount microscopy for clue cells, trichomonas (saline), fungi (10% KOH)
 - pH
 - Amine odor test (KOH "sniff" test)
 - Darkfield microscopy
 - Rapid plasma reagin (rapid syphilis test)
 - Rapid pregnancy test
 - Leukocyte esterase
 - Urinalysis



NYC Color Atlas & Synopsis of Sexually Transmitted Diseases. 3rd Edition. Handsfield, H, Hunter, 2011.

Diagnostic Tests

- **Microbiology**
 - NAAT tests* for all sites*
 - Cultures
 - Urine culture
- **Blood tests**
 - Syphilis serology
 - Rapid HIV test
 - HIV serology
 - HSV type-specific serology
 - Viral hepatitis-A,B,C
- **Cytology**
 - Cervical PAP (HPV)
 - Anal PAP
- **Other**
 - Skin scraping for scabies




*Oral and Rectal- Not FDA-approved; requires local lab validation

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CDC STD Treatment Guidelines, 2010


- Clinical guidance for the screening, diagnosis and treatment of STDs.
- Available at <http://www.cdc.gov/STD/treatment/2010/>



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CDC STD Treatment Guidelines Mobile App

- Diagnostic information and current STD Treatment Guidelines.
- Quick access to information about the diagnosis and treatment of 21 STDs.
- Access to booklet "A Guide to Taking a Sexual History."
- Available for both Apple and Android devices.
- Download for free from the iTunes and Google Play stores.



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Follow up

Follow up:


- Patients treated for uncomplicated GC/CT infections do not need a test of cure.
- TOC in 1 week if alternate treatment regime used – GC.
- Retest 3 months after treatment - GC/CT.
- Monitor RPR post treatment (6,12 mos.), more frequently if at high risk.
- HIV test

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Partner management

Partner management:

- Partners of those infected with STDs should be evaluated, tested and treated presumptively
- Infected persons should abstain from sexual intercourse until their treatment is completed and their partners are treated
- Partner notification
 - Inspot.org –
 - anonymous partner notification
 - Expedited Partner Therapy(EPT)



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Prevention Education/Counseling

Nature of infection

- Commonly asymptomatic in men and women.
- In women, increased risk of upper reproductive tract complications and squalor from STDs with re-infections

Transmission issues

- Effective treatment reduces HIV transmission and acquisition with certain STDs
- Abstaining from sex until partner treated prevents re-infection

Risk reduction counseling

- Discuss prevention strategies (abstinence, monogamy, condoms, limit number of sex partners, etc.).
- Vaccine preventable STDs – Hep A, Hep B, HPV

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STD CASES

Case Questions

- *What questions should be asked?*
- *What do you expect to find?*
- *What tests should you order?*
- *What treatment is recommended?*
- *What follow up is required?*

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Case 1

A 17 year-old female presents with increased vaginal discharge and intermittent burning with urination x 10 day. Discharge is whitish to yellow with no odor. She denies abdominal pain.

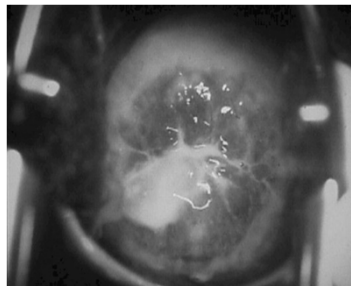
She states that she has been using a condom with her new male partner of 2 weeks.

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Case 1

Physical exam:

Mild yellowish discharge and easily-induced cervical bleeding.



Labs:

- pH = 3.5
- KOH whiff test - negative

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Case 1

How would you manage this patient?

- Treat with Azithromycin 1g PO x 1
- Treat with Azithromycin 1g PO x 1 and Ceftriaxone 250mg IM x 1
- Tell her to abstain from sex and to call you in 3 days for test results
- Treat with Azithromycin 1g PO x 1, Ceftriaxone 250 IM x 1 and Metronidazole 500mg BID x 7 days

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Cervicitis - Management

Treatment Options:

- **Treat presumptively for Ct:**
 - Young (<25), new or multiple sex partners, hx of unprotected sex
 - If follow-up is uncertain
- **Treat presumptively for GC and Ct:**
 - If risk factors as above and/or high local prevalence (>5%)
- **Await results of diagnostic tests:**
 - Low-risk, good follow-up, sensitive tests used (NAATs)

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Case 2

Alternate scenario for Case 1:

Physical exam reveals mild yellowish discharge from the os and easily-induced cervical bleeding. Cervical motion tenderness is equivocal—patient says, “that’s a little uncomfortable”—but she winces when you examine the R adnexa. You do not palpate any masses, and there is no rebound or guarding on abdominal exam.

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Case 2

How would you manage this patient?

- a) Send her to the Emergency Room
- b) Treat her with Ceftriaxone 250mg IM x 1, Doxycycline 100mg BID x 14 days and Metronidazole 500mg PO BID x 14 days, and tell her to return to clinic if she does not tolerate the medications at home
- c) Tell her to abstain from sex and to call you in 3 days for her test results
- d) Treat with Ceftriaxone, Doxycycline and Metronidazole and give her an appointment to see you in 3 days.

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PID Diagnosis

Minimum Criteria:

- Cervical motion tenderness OR uterine tenderness OR adnexal tenderness
- No single historical, physical or lab finding is both sensitive and specific for diagnosis of acute PID

Additional Criteria:

- Temp > 38.3 C (101 F)
- Abnormal discharge; abundant WBCs on wet mount
- Elevated ESR/C-reactive protein
- + GC/Ct laboratory test

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Case 3

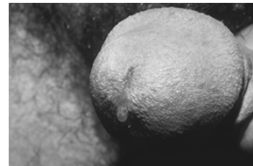
A 26 year-old male presents with a 1-week history of intermittent burning with urination. He also describes an “itchy” feeling inside of his penis. He denies urethral discharge.

He has had a steady girlfriend for the past 6 months, with whom he does not use condoms, and 3 “1 night stands” with women over the past 3 months.

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Case 3

Physical exam reveals a mucoid discharge from the urethra, no penile lesions and a normal testicular exam.



Source: Seattle STD/HIV Prevention Training Center at the University of Washington/UW HSCER Slide Bank

You treat empirically with Doxycycline 100mg BID x 7 days.

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Case 3

The patient returns 2 weeks later with persistent dysuria and discharge. Ct and GC urine NAATs from the last visit were *negative*. Physical exam is unchanged.

He states that he completed the course of doxycycline, and that his girlfriend was treated as well. He did not know how to contact the other 3 partners. He has not had sex with anyone other than his girlfriend since being treated.

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Case 3

How would you manage this patient?

- Treat with another course of Doxycycline
- Treat with Azithromycin 1g PO x 1
- Treat with Metronidazole 2g PO x 1 plus Azithromycin 1g PO x 1
- Refer to a urologist

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Recurrent and Persistent Urethritis

Differential Diagnosis:

- Re-exposure to untreated partner
- Incomplete treatment
- Persistent infection:
 - *Mycoplasma*
 - *Ureaplasma*
 - Trichomoniasis
- Non-infectious causes: chronic prostatitis(referral to Urology)

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Case 4

A 30 year-old male presents with a 2-day history of greenish urethral discharge and burning with urination. 5 days ago, he had unprotected receptive oral intercourse and receptive and insertive anal intercourse with a condom.

He reports 7 male partners over the past 3 months. Always uses a condom for anal sex, almost never for oral sex.

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Case 4

Physical exam:

- Copious, yellow/white urethral discharge.
- No lesions
- Skin, testicular and anal exam normal



What diagnostic tests would you order in this patient?

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Case 4

How would you treat this patient?

- Ciprofloxacin 500mg PO x 1
- Ceftriaxone 250mg IM x 1
- Doxycycline 100mg BID x 7 days
- Tell him to abstain from sex and to call for results in 3 days
- Ceftriaxone 250mg IM x 1 plus Azithromycin 1g PO x 1

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Case 4

What would you tell this patient about his partners?

- He should only notify his partner from 5 days ago
- He should tell all partners from the past year to be tested for HIV and other STDs
- He should notify partners from the past 60 days that they should be evaluated and treated for GC
- The health department will be contacting his partners because "We know who they are."

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Case 5

A 24 year-old male comes to see you because he wants to be "tested for everything." He has had 3 sexual partners over the past 3 months, including 2 males. He practices oral, anal and vaginal sex with his partners. He states that he uses condoms "most of the time."

STD screening reveals:

Rapid HIV EIA: negative
 Urine GC/Ct NAAT: negative
 Pharyngeal GC culture: negative
 Anal GC cultures: positive
 Anal Ct NAAT: positive

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Case 5

When he returns for treatment, he describes recent symptoms of intermittent rectal pain, bleeding after bowel movements, and tenesmus.

How would you treat his infection?

- Ceftriaxone 250mg IM x 1 plus Azithromycin 1g PO x 1
- Ceftriaxone 250mg IM x 1 plus Doxycycline 100mg BID x 21 days
- Azithromycin 2g PO x 1
- Ceftriaxone 250mg IM x 1 plus Doxycycline 100mg BID x 7 days

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Proctitis

- Inflammation of the rectal mucosa
- Associated with rectal anal intercourse
- Symptoms: rectal pain, tenesmus, constipation, mucopurulent discharge, hematochezia
- Etiology:
 - Neisseria gonorrhoea
 - Chlamydia trachomatis (including LGV strains)
 - Treponema pallidum
 - Herpes simplex virus



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Case 6

Alternate scenario to #5

- Patient returns to your clinic in 4 months. He states he last had sex at a sex party 3 weeks ago with three male partners. Now complaining of a painless lesion on penis x 1 week, no other genital complaints or symptoms.

Physical exam:

- 5x5 round ulcer on shaft
- Bilateral inguinal lymphadenopathy
- Normal perianal exam
- No mouth lesions
- No rash on trunk or palms/soles



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Case 6

• Test results

- RPR is 1:64, FTA Reactive
- Anorectal NAAT test is negative for GC and chlamydia.
- Urine NAATs are negative for GC and chlamydia
- Herpes cx negative
- Acute HIV testing was negative

- What are your next steps?

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Case 6

- The patient returns at 3 month intervals for titer checks:
 - 3 months RPR 1:16
 - 6 months RPR 1:4
 - 9 months RPR 1:4
 - 12 months RPR 1:2
 - 15 months RPR 1:32
- How do you interpret these results?
- His female partner is 10 weeks pregnant, next steps?



Response to Therapy by Syphilis Stage

- * Primary, Secondary Syphilis
 - Resolution of symptoms
 - By 6-12 months- Fall in RPR titer by 2 titers
- * Early Latent, Late Latent Syphilis
 - If RPR titer \leq 1:32 -
 - Fall in RPR titer by 2 titers within 12-24 months
- ??? HIV-infected Patients
- *Test persons with syphilis for HIV



MMWR. Sexually Transmitted Diseases Treatment Guidelines, 2010. Vol.59/No. RR-12.

THANK YOU!

