
**STANDARD
NURSE PROTOCOLS
FOR
SEXUALLY TRANSMITTED
DISEASES (STD)**

THIS PAGE INTENTIONALLY LEFT BLANK

2011-2012 STD CLINICAL REVIEW TEAM

**Mahin Park, Ph.D. HCLD
Director, Clinical Microbiology Services**

**Harold Katner, MD, FACP, FIDSA
Medical Consultant
Mercer University School of Medicine**

**Meshell McCloud, RN, APRN, WHNP-BC
Deputy Chief Nurse**

**Karen Kitchens, PHARM. D.
Director of Pharmacy, East Metro Health
District**

**Penny Conner, BSN, RN
PHSO Nurse Consultant-Immunization
Unit**

**Laurie McGhin, RN, BSN
Southwest Health District**

**Pradnya Balkrishna Tambe, MD, ECFMG
Physician Consultant**

**June Eddings, RN
Southwest Health District**

**Carolyn K. Simmons, RN, BSN, CNM
Director/County Nurse Manger
Southwest Health District**

**Michelle Allen, BA
STD Unit Director**

**Greg French RD, LD, CPT
WIC Nutrition Program Consultant**

**Kimberly Brown, RN, BSN
STD Nurse Consultant**

TABLE OF CONTENTS

SEXUALLY TRANSMITTED DISEASES (STD)	7
Bacterial Vaginosis	7.1
Chlamydia	7.5
Epididymitis	7.10
Genital Herpes	7.14
Genital Ulcer, Possible Primary Syphilis	7.22
Genital & Perianal Warts	7.26
Gonorrhea	7.31
Lymphogranuloma Venereum	7.38
Mucopurulent Cervicitis	7.42
Nongonococcal Urethritis	7.45
Pediculosis Pubis	7.49
Pelvic Inflammatory Disease	7.52
Scabies	7.57
Syphilis, Early Symptomatic	7.61
Syphilis, Latent	7.67
Trichomoniasis	7.75
Vulvovaginal Candidiasis	7.78

THIS PAGE INTENTIONALLY LEFT BLANK

STANDARD NURSE PROTOCOLS FOR BACTERIAL VAGINOSIS (BV)

DEFINITION	<p>The clinical result of the replacement of the normal <i>Lactobacillus</i> species in the vagina with high concentrations of anaerobic bacteria. This polymicrobial clinical syndrome is the most prevalent cause of vaginal discharge or malodor; however, half of the women whose illnesses meet the clinical criteria for BV are asymptomatic. Though associated with having multiple sex partners, it is unclear whether BV results from acquisition of a sexually transmitted pathogen. Treatment of male sex partners has not been beneficial in preventing recurrences.</p> <p>BV has been associated with adverse pregnancy outcomes (e.g., premature rupture of membranes, preterm labor, and preterm birth). Some specialists recommend the screening of high-risk pregnant women (i.e., those who have previously delivered a premature infant) for BV at the first prenatal visit.</p> <p>The desired outcome of treatment of non-pregnant females with BV is to relieve vaginal symptoms and signs of infection and reduce the risk for infectious complications after abortion or hysterectomy.</p>
ETIOLOGY	High concentrations of anaerobic bacteria (e.g., <i>Prevotella</i> species and <i>Mobiluncus</i> species), <i>Gardnerella vaginalis</i> , and <i>Mycoplasma hominus</i> .
SUBJECTIVE	Vaginal discharge, with an offensive odor that is often most noticeable after intercourse.
OBJECTIVE	<p>The following criteria are used to diagnose bacterial vaginosis.</p> <ol style="list-style-type: none">At least 3 of the following 4 are present:<ol style="list-style-type: none">Homogeneous, white, non-inflammatory discharge that smoothly coats the vaginal walls.The pH of vaginal secretions is higher than 4.5.A "fishy" odor of vaginal discharge, before or after mixing it with 10% KOH (positive "whiff" test)."Clue cells" (epithelial cells with a granular appearance caused by adherent bacteria) on microscopic wet mount of vaginal discharge.
ASSESSMENT	Bacterial Vaginosis

PLAN

DIAGNOSTIC STUDIES

1. **Observation for classic discharge, clue cells, “whiff” test and vaginal pH.**
2. **Check history for possible pregnancy.**

THERAPEUTIC

Treatment is only recommended for women with symptoms.

PHARMACOLOGIC

NOTE: Metronidazole should not be used for treatment during the first trimester of pregnancy. Lactating women taking metronidazole should withhold breastfeeding during treatment and for 12-24 hours after last dose to reduce child’s exposure to drug. Clindamycin is distributed into milk following systemic administration; it is not known if it is distributed into milk following intravaginal application but, because of the potential for adverse effects/reactions to clindamycin in nursing infants, a decision should be made whether to discontinue breastfeeding or to discontinue the drug, taking into account the importance of the drug to the woman.

1. If client is not pregnant
 - a. Metronidazole 500 mg PO, 2 times a day for 7 days,
OR
 - b. Metronidazole gel, 0.75%, one full applicator (5 gm), intravaginally, once a day for 5 days,
OR
 - c. Clindamycin cream, 2%, one full applicator (5 gm), intravaginally, at bedtime for 7 days,
OR
 - d. Clindamycin 300 mg PO, 2 times a day for 7 days.
2. If client is pregnant
 - a. Metronidazole 250 mg PO, 3 times a day for 7 days (during 2nd or 3rd trimesters only),
OR
 - b. Clindamycin 300 mg PO, 2 times a day for 7 days.

CLIENT EDUCATION/COUNSELING

(Reinforce pertinent information with handouts)

1. The name/significance of the syndrome.
2. Directions for taking medication and what to do about potential side effects (e.g., to avoid alcoholic beverages and other alcohol-containing products until **24** hours following completion of metronidazole therapy); instructions to lactating **clients** regarding discontinuance of breastfeeding.
3. This syndrome is generally not considered to be sexually transmitted, so sex partners should be referred for examination only if they are symptomatic of possible STD. Otherwise no treatment is necessary for sex partners.
4. **Instruct client to return for reevaluation if symptoms persist.**
5. HIV antibody test to determine HIV status, if unknown.
6. **Hepatitis A, Hepatitis B and or HPV vaccine, if client is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <http://www.health.state.ga.us/programs/immunization/publications.asp>.**

FOLLOW-UP

Client should return only if symptoms persist after treatment, or recur. Use an alternative treatment regimen for recurrent disease.

CONSULTATION/REFERRAL

1. Refer to **primary care provider if (three or more)** recurrences that do not respond to alternative treatment regimens.
2. **Public Health Employees must be familiar with reporting of possible sexual abuse if encountered through history, physical. All suspected sexual abuse must be reported to the county Department of Family and Children Services office as per guidelines for *Mandatory Reporting of Suspected Child Abuse for Public Health Personnel*.**
3. **Consult physician for repeated visit for BV for long term therapy.**

REFERENCES

1. Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010. (Current)
2. Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010. (Current)
3. U.S. Preventive Services Task Force. Screening for bacterial vaginosis in pregnancy to prevent preterm delivery: recommendation statement. *Ann Intern Med* 2008; 148:214–9. (Current)
4. Myer L, Kuhn L, Stein ZA, et al. Intravaginal practices, bacterial vaginosis, and women's susceptibility to HIV infection: epidemiological evidence and biological mechanisms. *Lancet Infect Disease* 2005; 5:786–94. (Current)
5. Guidelines Burke A. Cunha, M.D., *Antibiotic Essentials*, 8th edition, Physician's Press, Royal Oak, Michigan, 2009 (Current)
6. "Lexi-Comp Online," Lexi-Comp, Inc., <<http://online.lexi.com>> (May 2, 2011).

STANDARD NURSE PROTOCOL FOR CHLAMYDIA URETHRITIS/CERVICITIS

DEFINITION

A sexually transmitted infection that is often asymptomatic in both males and females. It may present as non-gonococcal urethritis (NGU) syndrome in males or mucopurulent cervicitis syndrome in females. It is especially common in adolescents and young adults. Occasionally, the periurethral or Bartholin glands may also show signs of being infected.

The desired outcomes of treatment of infected clients are: biologic cure, prevention of pelvic inflammatory disease (PID), ectopic pregnancy and infertility, prevention of transmission to sex partners, and prevention of transmission from infected females to infants during birth. Treatment of sex partners helps to prevent reinfection **and sequelae of Chlamydia in the index client** and infection of other partners.

ETIOLOGY

Chlamydia trachomatis, a bacteria.

SUBJECTIVE

1. Frequently asymptomatic, especially in females.
2. Females may have a history of:
 - a. Discharge from vagina.
 - b. Bleeding after intercourse.
3. Males may have a history of:
 - a. Urethral discharge.
 - b. Itching of urethral meatus.
 - c. Burning on urination.

OBJECTIVE

1. Many show no clinical signs.
2. Females
 - a. Mucoïd to mucopurulent endocervical discharge.
 - b. Cervical ectopy/friability.
3. Males
 - a. Mucoïd to mucopurulent urethral discharge.
 - b. Redness at urethral meatus.
4. Positive urethral, endocervical or urine test (amplification, culture, DNA probe) for *Chlamydia trachomatis*.
NOTE: Nonculture, nonamplified probe tests should not be used for diagnosing preadolescent children.

ASSESSMENT Chlamydia – Urethritis or Cervicitis

PLAN **DIAGNOSTIC STUDIES**

1. **Chlamydia test (nucleic acid amplification test (NAAT) or DNA probe.**
2. **Gonorrhea test (nucleic acid amplification test (NAAT), culture, or DNA probe) should always be done when chlamydia is suspected.**

THERAPEUTIC

PHARMACOLOGIC

NOTE: Prior to treatment of children, consult with or refer to primary care provider.

1. Nonpregnant adults, adolescents, and children who are at least 8 years old:
 - a. Azithromycin 1 gm PO, single dose,
OR
 - b. Doxycycline 100 mg PO, 2 times a day for 7 days.

NOTE: Do not give doxycycline to lactating **client; client must be advised** to discontinue breastfeeding **during treatment duration** or receive alternative regimen. **Do not give to children under the age of 8.**

2. If pregnant:
 - a. Azithromycin 1 gm PO, single dose,
OR
 - b. Amoxicillin 500 mg PO, 3 times a day for 7 days,
OR
 - b. Erythromycin base 500 mg PO, 4 times a day for 7 days,
OR
 - c. **Erythromycin base 250 mg PO, 4 times a day for 14 days,**
OR
 - d. **Erythromycin Ethylsuccinate 800 mg PO, 4 times a day for 7 days,**
OR
 - e. **Erythromycin Ethylsuccinate 400 mg PO, 4 times**

a day for 14 days.

3. Treatment of children under 8 years of age and who weigh less than 45 kg:
Erythromycin base or ethylsuccinate 50 mg/kg/day orally divided into 4 doses daily for 14 days.
4. Treatment of children under 8 years of age and who weigh greater than or equal to 45 kg:
Azithromycin 1 gm orally in a single dose.

CLIENT EDUCATION/COUNSELING

(Reinforce pertinent information with handouts)

1. The name of the infection and its significance.
2. Directions for taking medication and what to do about potential side effects.
3. Refer all sex partner(s) from within 60 days prior to the onset of symptoms or diagnosis of chlamydia for examination and treatment. Refer the last sex partner if the last sexual contact occurred prior to 60 days. Provide written note(s) to give to partners to refer them in for exam and treatment.
4. **Counsel the client about high risk of reinfection if client's partner(s) is not tested and treated. The usages of protective barriers (diaphragm, condoms, etc.) are not a substitute for protection for sexual intercourse for an untreated partner(s).**
5. Abstain from intercourse until 7 days after taking azithromycin or until the 7 day doxycycline regimen has been completed.
6. Assist client to develop a personalized STD/HIV risk reduction plan.
7. **Hepatitis A, Hepatitis B and or HPV vaccine, if client is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <http://www.health.state.ga.us/programs/immunization/publications.asp>**
8. HIV antibody test to determine HIV status, if unknown.

MANAGEMENT OF SEX PARTNERS

All sex partners, as defined above, should be examined and promptly treated with one of the above regimens **for chlamydia**.

FOLLOW-UP

1. **Nonpregnant adults/adolescents do not require a test-of-cure unless therapeutic compliance is in question, symptoms persist, or reinfection is suspected.**
2. Children should receive follow-up cultures to ensure that treatment has been effective.
3. Pregnant females should be retested 3 weeks after completing therapy, and rescreened near time of delivery.
4. **Chlamydia infected women (nonpregnant or pregnant) and men should be retested approximately 3 months after treatment, regardless of whether they believe that their sex partners were treated. If retesting at 3 months is not possible, clinicians should retest whenever persons next present for medical care in the 12 months following initial treatment.**

CONSULTATION/REFERRAL

1. If pregnant client cannot tolerate medication.
2. Signs of Bartholin gland abscess/cyst.
3. Prior to treatment of children, **under 45 kg**, consult with or refer to primary care provider.
4. **Public Health Employees must be familiar with reporting of possible sexual abuse if encountered through history, physical. All suspected sexual abuse must be reported to the county Department of Family and Children Services office as per guidelines for *Mandatory Reporting of Suspected Child Abuse for Public Health Personnel*.**

REFERENCES

1. Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12 (Current), December 17, 2010.
2. Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010. (Current)
3. “Lexi-Comp Online,” Lexi-Comp, Inc., <<http://online.lexi.com>> (March 11, 2011).

STANDARD NURSE PROTOCOL FOR EPIDIDYMITIS, SEXUALLY TRANSMITTED

DEFINITION	<p>A clinical syndrome characterized by inflammation of the epididymis causing pain and tenderness, associated with urethritis that may be asymptomatic, usually occurring in men less than 35 years of age. (Epididymitis occurring in men over 35 years of age is usually nonsexual and may be associated with urinary tract infections, systemic disease and immunosuppression).</p> <p>The desired outcomes of treatment are microbiologic cure, alleviation of signs and symptoms, prevention of transmission of infection to others, and prevention of potential complications (e.g., infertility or chronic pain).</p>
ETIOLOGY	<p>Common causes are <i>Chlamydia trachomatis</i> or <i>Neisseria gonorrhoeae</i>. <i>Escherichia coli</i> infection can occur in males who are the insertive partners during anal intercourse.</p>
SUBJECTIVE	<ol style="list-style-type: none">1. Scrotal pain and swelling, usually unilateral.2. May have dysuria and/or urethral discharge.3. No history of trauma to the area.
OBJECTIVE	<ol style="list-style-type: none">1. Tender scrotal swelling and on palpation cannot distinguish epididymis from testicle (see consultation and referral) AND/OR2. Gram-stained smear is positive for urethritis (i.e., smear contains more than 5 polymorphonuclear leukocytes per oil immersion field). The smear may or may not be positive for <i>Neisseria gonorrhoeae</i>.3 Microscope examination of first-voidurine sediment demonstrating more than 10 polymorphonuclear leukocytes per high
ASSESSMENT	<p>Epididymitis, sexually transmitted</p>
PLAN	DIAGNOSTIC STUDIES <ol style="list-style-type: none">1. When available, Gram-stained smear from urethra in males for Gonorrhea and for presumptive diagnosis of gonococcal infection2. Laboratory tests for gonorrhea and chlamydia, Nucleic Acid hybridization tests and/or gonorrhea culture.

3. Examination of first-void uncentrifuged urine for leukocytes if the Gram stain is negative. Also, culture and Gram-stain on the urine specimen.

THERAPEUTIC

PHARMACOLOGIC

1. If most likely due to gonococcal or chlamydial infection:
Ceftriaxone 250 mg IM, single dose,
PLUS
Doxycycline 100 mg PO, 2 times a day for 10 days,

NOTE: If allergic to cephalosporins or tetracyclines, refer for desensitization.

OR

2. If most likely due to enteric organisms, or with negative gonococcal culture or nucleic acid amplification test:
 - a. Ofloxacin 300 mg PO, 2 times a day for 10 days (if client is at least age 18),
OR
 - b. Levofloxacin 500 mg PO, once daily for 10 days (if client is at least age 18).
3. Oral analgesics for pain.

NON-PHARMACOLOGIC MEASURES

Client recommended bed rest, scrotal elevation **and support** to relieve swelling **and pain**.

CLIENT EDUCATION/COUNSELING

(Reinforce pertinent information with handouts)

1. The name of the syndrome and its significance, including that unresolved infection may lead to infertility.
2. Directions for taking medication and potential side effects and what to do about them.
3. Comfort measures.
4. To seek emergency medical care promptly if symptoms do not get

noticeably better, or worsen.

5. If infection with gonorrhea and/or chlamydia is known or suspected, refer sex partners for examination and treatment. Avoid sex until treatment is completed and client and partner(s) no longer have symptoms.
6. Assist client to develop a personalized STD/HIV risk reduction plan.
7. **Emphasize client follow up in 2-3 days for re-evaluation.**
8. **Emphasize the importance for client to return to clinic for all lab results even if presumptively treated at initial visit. Inform client if lab results are positive additional treatment will be needed.**
9. **Inform client that if additional lab are positive partner(s) will need additional treatment also.**
10. HIV antibody test to determine HIV status, if unknown.
11. **Hepatitis A, Hepatitis B and or HPV vaccine, if client is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <http://www.health.state.ga.us/programs/immunization/publications.asp>.**

MANAGEMENT OF SEX PARTNERS

If gonorrhea and/or chlamydial infection is known, or suspected, in the index client, all sex partners from within 60 days of onset of symptoms should be examined and receive appropriate treatment for gonorrhea and chlamydia.

FOLLOW-UP

Re-evaluate in 2-3 days. Failure to improve means the diagnosis and therapy should be reevaluated and hospitalization may be indicated.

CONSULTATION/REFERRAL

1. Immediately if unable to perform the necessary diagnostic testing, **cannot be treated with recommended drugs** or when emergency testing for testicular torsion may be indicated (when the onset of pain is sudden, pain is severe, or the test results

immediately available do not support a diagnosis of urethritis or urinary tract infection).

2. Intense pain should be evaluated by a urologist, even when urethritis is documented by Gram stain.
3. If no improvement in 2-3 days.
4. **Public Health Employees must be familiar with reporting of possible sexual abuse if encountered through history, physical. All suspected sexual abuse must be reported to the county Department of Family and Children Services office as per guidelines for *Mandatory Reporting of Suspected Child Abuse for Public Health Personnel.***

REFERENCES

1. Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010. (Current)
2. Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010. (Current)
3. "Lexi-Comp Online," Lexi-Comp, Inc., <<http://online.lexi.com>> (March 11, 2011).

STANDARD NURSE PROTOCOL FOR GENITAL HERPES

DEFINITION

A sexually transmissible viral infection characterized by recurring vesicular **blisters resulting in** ulcerative lesions on the genitals or adjacent areas that heal spontaneously without scarring. However, typical lesions are absent in many infected persons.

Some severe cases of first episode infection last an average of 12 days and aseptic meningitis or generalized symptoms due to viremia may occur. Subsequent milder recurrent infections do not last as long. During latency between clinical episodes, viral shedding occurs intermittently.

Most infected persons never recognize signs suggestive of genital herpes; some will have symptoms shortly after infection and then never again. Many cases are acquired from persons who do not know that they are infected.

Persistent infection (lesions for more than 4 weeks) or extensive anogenital ulceration and proctitis occur in immunocompromised persons. Diseases caused by herpes viruses are very common in persons with HIV infection and are AIDS-defining.

The desired outcome of treatment with systemic antiviral drugs is to minimize the signs and symptoms of herpes episodes.

ETIOLOGY

Herpes simplex virus (HSV), type 1 or type 2. Most genital infections are with type 2, which is most apt to cause recurrences. Type 1 causes most oral herpes (cold sores). **Presence of type 2 antibodies implies anogenital infection.**

SUBJECTIVE

1. Single or multiple blisters and/or shallow ulcers, usually painful, anywhere on the genitals.
2. May have a history of recurring lesions as described above, or a sex partner may have a history of similar lesions.
3. May have a history of recurring lesions in the genital area that do not meet the above description.
4. May have swollen tender lymph nodes in the groin.

OBJECTIVE	PHYSICAL/LAB FINDINGS
	<ol style="list-style-type: none">1. Typical vesicular lesions and/or shallow ulcers.2. May have atypical papular lesions and no ulcers.3. May have enlarged, tender inguinal lymph nodes.4. Identification of herpes simplex virus type 1 and/or 2 in lesion scrapings, by cell culture, <p style="text-align: center;">OR</p> <ol style="list-style-type: none">5. A clinical diagnosis is made based on the presence of characteristic single or multiple blisters and/or shallow painful ulcers that are typical for herpes, but not for syphilis or chancroid. Herpetic lesions are darkfield negative unless a co-existing syphilis lesion is present.6. Suspicious genital papules, vesicles or ulcers, with a history of episode(s) of similar symptoms or sexual exposure to a person with HSV are suggestive.

ASSESSMENT Genital Herpes

PLAN	DIAGNOSTIC STUDIES
	<ol style="list-style-type: none">1. Herpes culture to confirm diagnosis of typical lesions. Positive culture gives a definitive diagnosis. Absence of a positive culture however, does not mean the client does not have herpes.2. Type-specific HSV serologic assays might be useful in the following scenarios:<ul style="list-style-type: none">• If history of recurring genital or atypical lesions and obtaining an adequate specimen for a culture is not possible, order type-specific serologic antibody tests for HSV 1 and 2.• A clinical diagnosis of genital herpes without laboratory confirmation.• A partner with genital herpes.• A client with a history of multiple sex partners.• Clients with HIV infection.• MSM at increased risk for HIV acquisition.

3. Darkfield exam of lesion fluid and/or Rapid Plasma Reagin (RPR) to rule out syphilis. **Unless co-existing with syphilis, lesions will be darkfield negative.**
4. HIV antibody test to determine HIV status, if unknown.

THERAPEUTIC

PHARMACOLOGIC

Systemic antiviral drugs partially control the symptoms and signs of herpes episodes when used to treat first clinical episodes and recurrent episodes or when used as daily suppressive therapy. However, the drugs neither eradicate latent virus nor affect subsequent risk, frequency, or severity of recurrences after the drug is discontinued.

NOTE: Pregnant females must be referred to a physician for treatment. Lactating clients must discontinue breastfeeding while receiving treatment.

1. a. First genital episode
NOTE: Treatment may be extended if healing is incomplete after 10 days of therapy.
 - 1) Acyclovir 400 mg PO, 3 times a day for 7-10 days,
OR
 - 2) Acyclovir 200 mg PO, 5 times a day for 7-10 days,
OR
 - 3) Famciclovir 250 mg PO, 3 times a day for 7-10 days,
OR
 - 4) Valacyclovir 1 gm PO, 2 times a day for **10** days.
- b. Episodic recurrent episodes

NOTE: Effective episodic treatment of recurrent herpes requires initiation of therapy within 1 day of lesion onset, or during the prodrome that precedes some outbreaks. The client should be provided with a supply of medication with instructions to self-initiate treatment immediately when symptoms begin.

- 1) Acyclovir 400 mg PO, 3 times a day for 5 days,
OR
 - 2) Acyclovir 800 mg PO, 2 times a day for 5 days,
OR
 - 3) Acyclovir 800 mg PO, 3 times a day for 2 days,
OR
 - 4) Famciclovir 125 mg PO, 2 times a day for 5 days,
OR
 - 5) **Famciclovir 500 mg PO, once followed by 250 mg 2 times a day for 2 days,**
OR
 - 6) Famciclovir 1000mg PO, 2 times a day for 1 day,
OR
 - 7) Valacyclovir 500 mg PO, 2 times a day for 3 days,
OR
 - 8) Valacyclovir 1 gm PO, once a day for 5 days.
- c. Daily suppressive therapy, for clients with 6 or more recurrences per year (see FOLLOW-UP #3, p. 8.18).
- 1) Acyclovir 400 mg PO, 2 times a day,
OR
 - 2) Famciclovir 250 mg PO, 2 times a day,
OR
 - 3) Valacyclovir 500 mg PO, once a day, **use only if 9 or less recurrences per year**
OR
 - 4) Valacyclovir 1 gm PO, once a day.

NOTE: The use of Valacyclovir may be less effective than other dosing regimens in clients who have more than 9 episodes per year.

- d. HIV-infected clients
 - 1) Episodic treatment:
 - a) Acyclovir 400 mg PO, 3 times a day, for 5-10 days,
OR
 - b) Famciclovir 500 mg PO, 2 times a day for 5-10 days,
OR
 - c) Valacyclovir 1 gm PO, 2 times a day for 5-10 days.
 - 2) Daily suppressive therapy:
 - a) Acyclovir 400 - 800 mg PO, 2-3 times a day,
OR
 - b) Famciclovir 500 mg PO, 2 times a day,
OR
 - c) Valacyclovir 500 mg PO, 2 times a day.
- 2. Oral analgesic of client's choice (e.g., acetaminophen or ibuprofen) as needed.

NON-PHARMACOLOGIC MEASURES

- 1. Keep affected areas as clean and dry as possible. Pat lesions dry; avoid rubbing the area. (The use of ointments will retain moisture and may delay healing.)
- 2. Encourage increased intake of fluids (e.g., water) to dilute urine if it burns the affected area.

CLIENT EDUCATION/COUNSELING (Reinforce pertinent information with handouts)

Counseling of infected persons and their sex partners is critical to help the client cope with the infection and to prevent sexual and perinatal transmission. Although initial counseling is important, many clients benefit more from counseling about the chronic aspects of the disease after the acute illness subsides.

- 1. Educate about the natural history of the disease, the potential for recurrent episodes, and the risks of asymptomatic viral shedding between episodes.
- 2. Give clear directions for taking medication and potential side

- effects.
3. Advise clients experiencing a first episode that suppressive and episodic antiviral therapy is available to prevent or shorten the duration of recurrent episodes.
 4. Discuss comfort and pain-relieving measures.
 5. Encourage clients to inform their current sex partners about the infection and inform future partners before initiating a sexual relationship. Inform sex partners of infected persons that they might be infected even if they have no symptoms.
 6. Avoid sexual activity with uninfected partners when lesions or prodromal symptoms are present. At other times, correctly-used latex condoms may reduce the risk of transmission when the infected areas are covered.
 7. Explain the risk for neonatal infection to all clients, including men. Advise infected women of child-bearing age to inform health-care providers who care for them during pregnancy and those who will care for their newborn infant.
 8. Client should refer all symptomatic sex partner(s) for evaluation. Asymptomatic sex partners may be referred for evaluation and counseling.
 9. Discuss resources available for further information and psychological support **including availability of latex condoms.**
 10. **Risk of neonatal HSV should be discussed with females and males.**
 11. **Refer all pregnant clients who are infected or exposed to herpes to obstetrician.**
 12. **Episodic treatment does not reduce risk of transmission.**
 13. **Recurrence of lesions does not mean that the client has been reexposed.**
 14. **Hepatitis A, Hepatitis B and or HPV vaccine, if client is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <http://www.health.state.ga.us/programs/immunization/publications.asp>.**

MANAGEMENT OF SEX PARTNERS

1. Symptomatic sex partners should be managed the same as any client with genital lesions. **Educate to understand the natural history of HSV including possibility of asymptomatic shedding of virus and lesions reappearing without sexual re-exposure.**
2. Ask asymptomatic partners about a history of typical or atypical genital lesions and encourage **examining** themselves for lesions in the future. Counsel about the possibility of being infected even if they have never been symptomatic. Order type-specific serologic antibody testing from the State Public Health Laboratory to determine whether the risk for HSV acquisition exists.

FOLLOW-UP

1. Schedule an appointment with the client when culture results are available. Individualize counseling according to clinical progress and apparent emotional impact where further education and counseling for client and sex partners may be indicated. Assist client to develop a personalized STD/HIV risk reduction plan.
2. If the client did not have a positive herpes culture, order type-specific serologic antibody testing from the State Public Health Laboratory to confirm the clinical diagnosis of genital herpes and determine the type of antibodies present. This has important counseling implications, since HSV 1 genital infection is less likely to cause asymptomatic shedding or to recur than HSV 2.
3. For clients on continuous daily suppressive therapy, **discuss therapy after one year**, to assess the client's psychological adjustment to genital herpes and rate of recurrent episodes.

CONSULTATION/REFERRAL

1. If symptoms of meningitis (**e.g., headache, nausea, vomiting, stiff neck**) during first **or with recurrent** episode(s).
2. For additional information and psychological support, refer to: Local HELP line (**678-561-4377** in Atlanta) or the National Herpes Hotline, 919-361-8488 or http://www.ashstd.org/herpes/herpes_overview.cfm
3. **Refer to physician the following types of clients:**

- a. **Pregnant**
 - b. **With history of renal impairment**
 - c. **With persistent lesions**
4. **Refer to HIV Infectious Disease specialist for evaluation if client has persistent lesions and is on antiviral therapy.**
 5. **Public Health Employees must be familiar with reporting of possible sexual abuse if encountered through history, physical. All suspected sexual abuse must be reported to the county Department of Family and Children Services office as per guidelines for *Mandatory Reporting of Suspected Child Abuse for Public Health Personnel*.**

REFERENCES

1. **Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12 (Current), December 17, 2010.**
2. **Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010. (Current)**
3. **“Lexi-Comp Online,” Lexi-Comp, Inc., <<http://online.lexi.com>> (March 11, 2011).**

STANDARD NURSE PROTOCOL FOR GENITAL ULCER, POSSIBLE PRIMARY SYPHILIS

DEFINITION

The possibility of syphilis should be investigated for all genital ulcers. “Possible Primary Syphilis” is a tentative assessment based on the clinical findings of an ulcerated lesion, typical of the classic ulcer associated with primary syphilis, appearing in the genital area of a sexually active adult. The client is not a known contact to early syphilis, and laboratory diagnostic criteria for primary syphilis (positive darkfield exam or newly-reactive Rapid Plasma Reagin [RPR] serology are unable to be immediately met).

Factors in deciding to give treatment for possible primary syphilis before RPR results are available may be that the client is thought to be unreliable and may not follow directions to avoid sexual contact, may not be easily notified, and/or may not keep a follow-up appointment.

If a primary syphilis ulcer has been present for less than a week, the RPR may be nonreactive, and treatment at this point could mask the diagnosis. In some cases, a Fluorescent Treponemal Antibody Absorption (FTA-ABS) but not an Enzyme Immunoassay (EIA) may be reactive prior to the RPR becoming reactive.

ETIOLOGY

Treponema pallidum, a spirochete, is the causative organism for syphilis. The most common sexually-transmitted cause of genital ulcers in the United States is herpes simplex virus, for which testing should also be done on all genital ulcers. There are also many other causes of genital ulcers.

SUBJECTIVE

1. Painless open sore in the genital area.
2. May have non-tender, swollen glands in the groin.
3. No history of contact to a known case of early syphilis, though **client** may have noticed a suspicious lesion or rash on a sex partner.

OBJECTIVE

1. Painless ulcer with an indurated border and relatively clear base, in the genital area.
2. May have firm, non-tender, and modestly enlarged inguinal lymph node(s), frequently bilateral.

ASSESSMENT Genital Ulcer, Possible Primary Syphilis

PLAN **DIAGNOSTIC STUDIES**

1. Rapid Plasma Reagin (RPR), with titer. **Obtain history of past syphilis serologic results.**
2. Enzyme Immunoassay (EIA) and Fluorescent Treponemal Antibody Absorption (FTA-ABS) if no history of previous syphilis; if the ulcer has been present for less than a week, order FTA regardless of RPR or EIA results.
3. Herpes culture.
4. HIV antibody test to determine HIV status, if unknown.

THERAPEUTIC

PHARMACOLOGIC

NOTE: If Benzathine Penicillin G is in short supply, reserve **the** existing penicillin for pregnant and HIV infected clients. For non-pregnant and/or non-HIV infected clients, follow nurse protocol in 1.b. below: Doxycycline 100 mg PO, 2 times a day for 14 days.

1. If client is neither pregnant nor HIV-infected
 - a. Benzathine Penicillin G, 2.4 million units (mu) IM, once,

OR

 - b. If history of allergy to penicillin, doxycycline 100 mg PO, 2 times a day for 14 days.

NOTE: Do not give doxycycline to pregnant or lactating client; client must **be advised** to discontinue breastfeeding or receive alternative regimen.

2. If client is pregnant
 - a. Benzathine Penicillin G, 2.4 mu IM, once, after consultation with the prenatal care provider,

OR

 - b. If client is allergic to penicillin, await lab results **and consult physician.**
3. If client is HIV-infected
 - a. Benzathine Penicillin G, 2.4 mu IM, once,

OR

- b. If **client** is allergic to penicillin, await lab results **and consult physician.**

CLIENT EDUCATION/ COUNSELING

(Reinforce pertinent information with handouts)

1. The name of the suspected infection and its significance.
2. If given oral medication, directions for taking it and what to do about potential side effects. **Importance of follow up should be discussed, especially if first line drug (Benzathine Penicillin G) is not used.**
3. The possibility of a Jarisch-Herxheimer (**e.g. fever, chills, headache, myalgia, and exacerbation of cutaneous lesions**) reaction and what to do about it.
4. The need to refer sex partners from within the previous three months to be examined **and treated** as soon as possible **after the diagnosis is established.**
5. Avoid sex until infection status of self and partner(s) is known.
6. Assist client to develop a personalized STD/HIV risk-reduction plan.
7. **Hepatitis A, Hepatitis B and or HPV vaccine, if client is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <http://www.health.state.ga.us/programs/immunization/publications.asp>**

MANAGEMENT OF SEX PARTNERS

1. Do thorough history and examination for signs of syphilis; draw blood for RPR.
2. Counsel client that he/she may need treatment for syphilis, depending on test results on partner or self.

FOLLOW-UP

1. If **District** Communicable Disease Specialist **is** not on-site, record thorough identifying and locating information on client and partner(s) for **District Communicable Disease Specialist** use if diagnosis of syphilis results.
2. Give the client an appointment to return to the clinic in one week, no matter what the lab results are. Examine lesion for response to treatment. If the original RPR, EIA and FTA were negative and the lesion was highly suspicious for syphilis, but present for a week or less, order repeat tests.
3. If a diagnosis of primary syphilis is made, do follow-up per syphilis nurse protocol. **Do a repeat RPR in one month regardless of the diagnosis to ensure that a syphilis diagnosis is not missed.**

CONSULTATION/REFERRAL

1. **Notify** immediately, **District Communicable Disease Specialist** for **partner services and case management.**
2. Consult/refer to physician if lesion does not improve in one week.
3. Consult with physician if client is pregnant and allergic to penicillin for desensitization referral.
4. **Public Health Employees must be familiar with reporting of possible sexual abuse if encountered through history, physical. All suspected sexual abuse must be reported to the county Department of Family and Children Services office as per guidelines for *Mandatory Reporting of Suspected Child Abuse for Public Health Personnel.***

REFERENCES

1. Centers for Disease Control and Prevention, ***Sexually Transmitted Diseases Treatment Guidelines 2010***, Vol. 59, No. RR-12, December 17, 2010. (Current)
2. Erratum: ***MMWR***, Vol. 59, RR-12, December 17, 2010. (Current)
3. King K. Holmes, et. al., eds., *Sexually Transmitted Diseases*, Third Edition, McGraw Hill, New York, 1999. (Current)
4. "Lexi-Comp Online," Lexi-Comp, Inc., <<http://online.lexi.com>> (March 11, 2011).

STANDARD NURSE PROTOCOL FOR GENITAL/PERIANAL WARTS

DEFINITION Infection of the genital and/or anal areas with the human papillomavirus (HPV). It is usually sexually transmitted, and the viral strains causing anogenital warts are not usually found on other areas of the body. **Asymptomatic genital HPV infection is common and usually self-limited.** While intra-anal warts are seen predominately in clients who have receptive anal intercourse, perianal warts can occur in males and females who do not **give** a history of anal sex.

The desired outcome of treatment is the removal of symptomatic warts. Treatment can induce wart-free periods in most clients.

ETIOLOGY The larger, fleshy warts are usually caused by HPV types 6 or 11; flat warts are caused by HPV types 16, 18, 31 and others. **HPV 16 and 18 are considered to be the cause of cervical cancers.** The higher-numbered types are the ones associated with cervical and other anogenital cancers. Regardless of type, most HPV infections are subclinical. However, depending on the size and anatomic location, genital warts can be painful, friable and pruritic.

SUBJECTIVE

1. May have no noticeable symptoms.
2. Bumps/growths in the genital or anal areas.

OBJECTIVE The following criteria are used to diagnose genital/perianal warts:

1. Single or multiple typical soft, fleshy growths on the skin or mucous membranes around the vulvovaginal area, anal area, penis, urethra or perineum. They may be like cauliflower, with a stalk-like base, or have a broad base.
2. Demonstration of typical cytologic changes on a Pap smear is suggestive of subclinical HPV infection. **HPV is associated with higher grade intraepithelial neoplasia.**

ASSESSMENT Genital and/or Perianal Warts (specify site)

PLAN **DIAGNOSTIC STUDIES**

1. RPR and darkfield exam of **any open** moist lesions to rule out **primary syphilis or condylomata lata of secondary syphilis.**
2. HIV antibody test to determine HIV status, if unknown.

3. **A biopsy may be indicated if the wart(s) does not respond to therapy or gets worse during treatment.**
4. **HPV specific tests detect viral nucleic acid (i.e. DNA or RNA) capsid protein. Approved FDA Tests: HC II High-Risk HPV test (Quiagen), HC II Low-Risk HPV test (Quiagen), Cervista HPV 16/18 test and Cervista HPV High Risk Test (Hologics).**

THERAPEUTIC

NOTE: Treatment of genital warts is optional, and the warts may spontaneously regress. Many clients will require a course of therapy rather than a single treatment. **Treatment is not indicated in the absence of lesions.**

PHARMACOLOGIC

1. Client-Applied:

NOTE: For genital warts only. Client must be able to identify and reach warts to be treated; the clinician should demonstrate the proper application technique and identify which warts should be treated.

NOTE: Podofilox or Imiquimod should not be used in children, pregnant or nursing clients.

- a. Podofilox 0.5% solution or gel. Apply solution with a cotton swab, or gel with a finger or swab, twice a day for 3 days, followed by 4 days of no therapy. Wash hands after applying medication. This cycle may be repeated, as necessary, for a total of 4 cycles. The total area treated should not exceed 10 cm², and no more than 0.5 mL of podofilox used per day.

OR

- b. If 12 years of age or older, Imiquimod 5% cream, (i.e., Aldara). Apply cream with a finger or cotton swab at bedtime, three times a week until warts are cleared, for up to 16 weeks. Wash hands after applying the medication. Wash the treatment area with mild soap and water 6-10 hours after the application.

2. Provider-Administered

NOTE: This **Trichloroacetic acid, bichloroacetic acid or Podophyllin** should not be used in children, pregnant or nursing clients.

NOTE: Refer to the product package insertion prior to administration.

a. Trichloroacetic acid (TCA) or bichloroacetic acid (BCA) 80-90% solution, applied sparingly to warts and allowed to dry to a white "frosting" before the client sits or stands. If an excess amount is applied, powder the treated area with liquid soap preparation, talc or sodium bicarbonate to remove unreacted acid. May repeat weekly as necessary.

OR

b. Podophyllin 10-25% in compound tincture of benzoin, applied topically and allowed to air dry. Limit each treatment to less than 0.5 mL applied to an area of less than 10 square cm of warts per session. Repeat weekly if necessary, up to **4 (four)** applications. Do not use Podophyllin during pregnancy **or on open lesions and wounds.**

CLIENT EDUCATION/COUNSELING

(Reinforce pertinent information with handouts)

1. The name of the infection and its significance. For the fleshy warts, stress that these are not usually caused by the same strains that are associated with cancer, but it is possible that other strains are also present. Treatment of external warts is not likely to influence the development of cervical cancer.
2. Directions for care of the treated area. To reduce local irritation, suggest washing off podophyllin in 1-4 hours.
3. No treatment, even laser, is known to eradicate the virus, and recurrences are common. Recurrences occur most frequently during the first 3 months, and are usually due to reactivation of latent virus rather than reinfection by a sex partner.
4. Infected females should undergo regular cervical Pap screening as recommended for females without genital warts.
5. Partners may be infected with HPV even if they have no visible warts. The use of condoms may reduce transmission to new partners.

6. HPV infection may persist lifelong in a dormant state and become infectious intermittently.
7. For client-applied treatment:
 - Do not use more often than directed or on any other area of the body. Wash hands immediately after applying medication.
 - Report problems with application or side-effects, such as bleeding or severe swelling of tissue. Mild to moderate pain or local irritation is common with podofilox. Mild to moderate local inflammatory reactions are common with imiquimod.
 - Do not share the medication with anyone else.
 - Do not have intercourse during the days when warts are being treated with podofilox or when imiquimod cream is on the skin.
 - Females should avoid getting pregnant.
8. Assist client to develop a personalized STD/HIV risk reduction plan.
9. **Hepatitis A, Hepatitis B and or HPV vaccine, if client is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <http://www.health.state.ga.us/programs/immunization/publications.asp>**

MANAGEMENT OF SEX PARTNERS

1. Examine all referred sex partners for genital warts and other STDs.
2. Recommend a Pap smear for female partners who have not had one in the past year.

FOLLOW-UP

1. If desired, clients using self-administered treatment may return in a few weeks for assessment of treatment response.
2. For provider-administered topical treatment, apply weekly as needed. If no significant improvement in four weeks, or if warts have not completely cleared after six weeks, alternative therapy should be used.

CONSULTATION/REFERRAL

1. Extensive external genital/perianal warts, or if smaller warts do not respond to available topical therapy.
2. Cervical, vaginal, anal or urethral warts are present.
3. For Pap smear, as needed.
4. If client is pregnant, consult with physician for referral.
5. **Public Health Employees must be familiar with reporting of possible sexual abuse if encountered through history, physical. All suspected sexual abuse must be reported to the county Department of Family and Children Services office as per guidelines for *Mandatory Reporting of Suspected Child Abuse for Public Health Personnel*.**
6. **Consult with or refer to primary care provider if warts not responding to treatment.**

REFERENCES

1. Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010. (Current)
2. Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010. (Current)
3. "Lexi-Comp Online," Lexi-Comp, Inc., <<http://online.lexi.com>> (March 11, 2011).

**STANDARD NURSE PROTOCOL FOR
GONORRHEA
Uncomplicated Urethral, Endocervical, Rectal or Pharyngeal**

DEFINITION A sexually transmitted genital, anorectal or pharyngeal infection that may be symptomatic or asymptomatic. (Occasionally, the periurethral or Bartholin glands may also show signs of being infected.)

The desired outcomes of treatment are: biologic cure, prevention of transmission to sex partners, prevention of pelvic inflammatory disease (PID) and resulting ectopic pregnancy or infertility, and, for pregnant women, prevention of transmission to infants during birth. Treatment of sex partners helps to prevent reinfection of the index client and infection of other partners.

ETIOLOGY *Neisseria gonorrhoeae*, a Gram-negative diplococcus. Infections caused by antibiotic resistant strains are clinically indistinguishable from drug-sensitive infections.

- SUBJECTIVE**
1. May be asymptomatic at any infected site, especially females.
 2. Males frequently have purulent urethral discharge and burning on urination.
 3. Females may notice discharge from the vagina, **abdominal pain and dysuria**.
 4. Rectal discharge or pain, with history of rectal sex.
 5. Sore throat, with history of oral sex.
 6. May have history of sexual contact to an individual with gonorrhea.

OBJECTIVE SIGNS

1. Females commonly have no clinical signs.
2. Muroid, mucopurulent or purulent discharge from the infected site.
3. Anorectal inflammation and/or discharge.
4. Pharyngeal inflammation.

5. Signs of complications of gonorrhea include Pelvic Inflammatory Disease and Epididymitis.

LABORATORY FINDINGS

NOTE: Nonculture, nonamplified probe tests should not be used for diagnosing preadolescent children. **Only GC culture or amplified DNA Probe remains the preferred method for diagnosis.**

1. Adult Endocervical or Urethral Infection
 - a. Nonculture detection of *N. gonorrhoeae* (e.g., DNA probe, **nucleic acid amplification test**).
 - b. Culture positive for *N. gonorrhoeae*, with or without confirmatory tests.
 - c. Gram-negative intracellular diplococci seen on a smear of male urethral discharge. Gram stains are to be done in-house on symptomatic male clients in an effort to make a diagnosis and treat the clients on the same day.

NOTE: You must perform either “a” or “b” in female clients. In male clients, you must perform “a” or “b” and when available “c”; however, you can treat the male client based on diagnostic criteria “c” alone.

NOTE: If the criteria for gonorrhea are not present, treatment should be deferred pending the results of the diagnostic studies. Empiric treatment for gonorrhea must be given in the following cases

- Contact to Gonorrhea
- Documented or contact to PID
- Documented or contact to Epididymitis
- Symptoms of discharge in males with visible discharge on examination (in case Gram stain not available).

2. Genital Infection in a Child Positive culture for *N. gonorrhoeae*, confirmed by two different acceptable methods.
3. Rectal Infection or Pharyngeal Infection Culture positive for *N. gonorrhoeae*, confirmed by an acceptable method.

ASSESSMENT Gonorrhea [specify infected site(s)]

PLAN

DIAGNOSTIC STUDIES

1. Gonorrhea test (**nucleic acid amplification test (NAAT)**, culture or DNA probe) if diagnosis is made on male urethral smear.
2. Amplification or DNA probe test for **Chlamydia should always be done when gonorrhea is suspected.**
3. **Gram Negative intracellular diplococci on gram stain.**
4. **Gonorrhea culture, when indicated, examples are:**
 - **GISP study if ongoing**
 - **Suspected therapeutic failure after Gonorrhea treatment**
 - **Adults with oral and rectal exposure should have cultures done at the exposed site**
 - **In children with suspected sexual abuse, do oral and rectal cultures regardless of history exposure**
 - **As requested by a physician, or supervisor**
 - **When Nucleic hybridization test are not available**
5. Children with gonorrhea should also be tested for chlamydia and syphilis. **Sexual abuse is the most frequent cause of gonococcal infection in preadolescent children.**
6. HIV antibody test to determine HIV status, if unknown.

THERAPEUTIC

PHARMACOLOGIC

NOTE: Prior to treatment of children, consult with or refer to primary care provider.

NOTE: If allergic to cephalosporins or penicillins, refer for penicillin or cephalosporin desensitization.

- A. Cervical, Urethral, Rectal or **Pharyngeal Infection of nonpregnant adults/adolescents or children weighing at least 45 kilograms (kg):**
 1. **Recommended Regimen**
 - a. **Ceftriaxone 250 mg IM, single dose,**
OR
 - b. **Cefixime 400 mg PO, single dose (is less effective than ceftriaxone and not effective**

against pharyngeal gonococcal infection).

NOTE: It is not known if Cefixime is excreted in breast milk. The manufacturer recommends that consideration be given to discontinuing nursing temporarily during treatment. Other cephalosporins are considered safe during breastfeeding. If present in breast milk, non-dose related effects could include modification of bowel flora.

PLUS,

- 1) Azithromycin 1 gm PO once,
OR
- 2) Doxycycline 100 mg PO, 2 times a day for 7 days (only if at least age 8).

NOTE: Do not give doxycycline to lactating client; client must be advised to discontinue breastfeeding or receive alternative regimen.

2. If referral for desensitization is unavailable or client refuses,

Azithromycin 2 gm PO once, given with food to lessen occurrence of GI symptoms, followed by retesting in 3 weeks.

NOTE: CDC does not recommend widespread use of this drug due to concerns regarding emergence of resistance.

- B. Cervical, Urethral, Rectal or Pharyngeal Infection of Pregnant adult/adolescent or children weighing at least 45 kg:**

- 1) **Ceftriaxone 250 mg IM, single dose,**
PLUS,

Azithromycin 1 gm PO, single dose,

- 2) If referral for desensitization is unavailable or client refuses,

Azithromycin 2 gm PO once, given with food to lessen occurrence of GI symptoms, followed by retesting in 3 weeks.

NOTE: CDC does not recommend widespread use of this drug due to concerns regarding emergence of resistance.

- C.** Genital, rectal **or pharyngeal** infections in children weighing less than 45 kg:

Ceftriaxone 125 mg IM, single dose,

NOTE: Children with gonorrhea should also be tested for chlamydia and syphilis.

NOTE: Spectinomycin is not available in the United States. Quinolones are no longer recommended. See following web site: <http://www.cdc.gov/std/gisp>

Co-treatment for Gonorrhea and Chlamydia, with appropriate drugs and dosage, reduces antimicrobial resistance and enhances pharyngeal treatment of Gonorrhea.

CLIENT EDUCATION/COUNSELING

(Reinforce pertinent information with handouts)

1. The name of the infection and its significance.
2. Directions for taking medication and what to do about potential side effects.
3. Refer all sex partner(s) from within 60 days prior to the onset of symptoms or positive test to the current date, for examination and treatment. Avoid sex until partner has been treated. Refer the last sex partner if the last sexual contact occurred prior to 60 days. Provide written note(s) to give to partners to refer them in for exam and treatment.
4. Assist client to develop a personalized STD/HIV risk reduction plan.
5. If treated with Azithromycin tablets 2 gm PO, have client return for retesting 3 weeks after treatment.
6. **Advise the client to return to clinic for all lab results even if presumptively treated at initial visit. Inform client if lab results are positive additional treatment will be needed.**
7. **Inform client if additional lab(s) is/are positive, partner(s) will**

need additional treatment also.

8. HIV antibody test to determine HIV status, if unknown.
9. **Hepatitis A, Hepatitis B and or HPV vaccine, if client is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <http://www.health.state.ga.us/programs/immunization/publications.asp>.**

MANAGEMENT OF SEX PARTNERS

All sex partners, as defined above, should be examined and promptly treated with one of the above regimens, according to exposure site(s).

FOLLOW-UP

1. Persons who have uncomplicated gonorrhea and are treated with any of the above regimens except Azithromycin tablets 2 gm PO need not return for retesting. Those treated with Azithromycin tablets 2 gm PO are to return in 3 weeks for retesting. If retest is positive, consult with physician.
2. **Test-of-cure is not routinely recommended unless therapeutic failure is suspected.** Apparent treatment failure: Question carefully about the possibility of reinfection. If possible, a client with symptoms that persist after treatment should have a gonorrhea culture done, with anti-microbial sensitivity testing on a positive culture.
3. ***N. gonorrhoeae* infection is prevalent among clients who have been diagnosed with and treated for gonorrhea in the preceding several months. Most infections result from reinfection rather than treatment failure, indicating a need for improved client education and referral of sex partners. Clinicians should advise clients with gonorrhea to be retested three months after treatment. If clients do not seek medical care for retesting in three months, providers are encouraged to test these clients whenever they next seek medical care within the following 12 months, regardless of whether the clients believe that their sex partners were treated. Retesting is distinct from test-of-cure to detect therapeutic failure, which is not recommended.**

CONSULTATION/REFERRAL

1. Refer to a District Communicable Disease Specialist if repeat infections within a short time, for prevention counseling and assistance with partner referral.
2. Refer to a physician if signs of Bartholin gland abscess or cyst are present.
3. Refer client to a physician if client cannot tolerate cephalosporins, penicillins, or azithromycin.
4. If client is treated with **Azithromycin 2 gm PO** and has positive retest, consult with physician.
5. Children allergic to cephalosporins or penicillins for desensitization or alternate treatment.
6. **Public Health Employees must be familiar with reporting of possible sexual abuse if encountered through history, physical. All suspected sexual abuse must be reported to the county Department of Family and Children Services office as per guidelines for *Mandatory Reporting of Suspected Child Abuse for Public Health Personnel*.**
7. **Infants of mothers with untreated gonorrhea must be referred to physician for evaluation and possible treatment.**

REFERENCES

1. **Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010. (Current)**
2. **Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010. (Current)**
3. CDC, "Notice to Readers: Discontinuation of Spectinomycin," *MMWR*, Vol. 55, No. 13, April 7, 2006. **(Current)**
4. "Lexi-Comp Online," Lexi-Comp, Inc., <<http://online.lexi.com>> (May 2, 2011).
5. **GA Department of Community Health, *Guidelines for Mandatory Reporting of Suspected Child Abuse for Public Health Personnel*, Oct 2010, Pg. 1-9**

STANDARD NURSE PROTOCOL FOR LYMPHOGRANULOMA VENEREUM (LGV)

DEFINITION

LGV is a systemic, sexually transmitted disease (STD) or infection caused by a type of *Chlamydia trachomatis* (serovars L1, L2, L3). The incidence is highest among sexually active people living in tropical or subtropical climates. It is rarely diagnosed in the United States or other industrialized countries. Yet, an outbreak in November 2004, in the Netherlands among men who have sex with men suggests that the number of cases may be on the rise. It has three clinical stages:

1. Primary stage: A papule at the site of infection, which ulcerates and then heals rapidly. Mild urethritis may also occur. The client rarely presents for examination at this stage.
2. Secondary Stage: Usually occurring 10-30 days after the primary stage, it is characterized by increasing inguinal lymphadenopathy or, in persons exposed by receptive anal intercourse, acute hemorrhagic proctitis. The lymphadenopathy is usually unilateral; less than 20% have the “groove sign” showing involvement of the femoral nodes also. Diagnosis and treatment during the stage can have the desired outcome of curing infection and prevention of ongoing tissue destruction.
3. Third stage: Denoted by chronic inflammation of the lymph nodes, ulceration and fistula formation. Clients, especially those who have engaged in unprotected anal sex may present with an atypical presentation. Symptoms could include proctitis or proctocolitis with rectal discharge, bleeding, pain on defecation or tenesmus.

ETIOLOGY

Chlamydia trachomatis, serovars L1, L2, or L3.

SUBJECTIVE

1. Swollen glands in the groin with or without bubo.
2. May have history of briefly occurring painless papule/ulcer in the genital area.
3. Proctitis or proctocolitis with rectal discharge, tenderness and bleeding, with history of rectal sex. May complain of constipation, pain on defecation and tenesmus.

OBJECTIVE

NOTE: Diagnosis of LGV can be complicated. Diagnosis should be made considering a thorough sexual history, travel history, clinical findings and several laboratory tests including Chlamydia serology and Chlamydia serotyping of specimens.

1. Client history and clinical findings consistent with LGV. One or

more tender, progressively enlarging, fluctuant inguinal lymph nodes,

OR

Characteristic signs of hemorrhagic proctitis in a person with history of rectal sex. May be accompanied by fever, malaise and myalgias.

AND

2. Positive microimmunofluorescent (MIF) serologic test titer more than 1:128, for a lymphogranuloma venereum strain of *Chlamydia trachomatis* (serum).

AND

Isolation/culture of *Chlamydia trachomatis*, LGV serotypes L1, L2 or L3 from clinical specimen (rectal swab).

ASSESSMENT Lymphogranuloma Venereum (LGV)

PLAN **DIAGNOSTIC STUDIES**

NOTE: All specimens must be submitted to the Public Health Laboratory.

1. Positive microimmunofluorescent (MIF) (titer more than 1:128) serologic test for a lymphogranuloma venereum strain of *Chlamydia trachomatis* (serum).
2. Isolation/culture of *Chlamydia trachomatis*, LGV serotype L1, L2 or L3 from a clinical specimen (rectal swab).
3. Serology for HIV and for syphilis (RPR).
4. If ulcer present: darkfield exam and herpes culture.

THERAPEUTIC

PHARMACOLOGIC

1. If **client** is not pregnant:
 - a. Doxycycline 100 mg PO, 2 times a day for 21 days, **NOTE:** Lactating client must be advised to discontinue breastfeeding while on doxycycline or receive alternative regimen.

OR

 - b. If can not take Doxycycline, Erythromycin base 500mg PO, 4 times a day for 21 days.
2. If **client** is pregnant: Erythromycin base 500 mg PO, 4 times a day for 21 days.

3. Persons with both LGV and HIV infection should receive the same regimens as those who are HIV-negative.

CLIENT EDUCATION/COUNSELING

(Reinforce pertinent information with handouts)

1. Give directions for taking the medication and potential side effects and what to do about them. Stress the importance of finishing medications. Advise to abstain from sexual contact until treatment is completed and until partners have finished all their medication.
2. Refer sex partners from within 30 days prior to the development of symptoms for examination and treatment and avoid sex until partner has been treated.
3. Stress safe sex practices among men who have sex with men (MSM) and bisexual men. Emphasize the importance of avoiding penetrating sex and regular use of condoms. Limiting the number of sex partners can also reduce risk.
4. Counsel client on individualized STD/HIV risk reductions and incorporate reduction plan.

NOTE: LGV can facilitate the spread of other STDs including HIV because of the disease's ulcers. Keep acute HIV infection and syphilis in mind as well as LGV when clients present with symptoms. HIV and syphilis are more prevalent than LGV in Georgia and clients should be screened for all STDs.

5. **Emphasize the importance of regular health screenings among high-risk populations.**
6. **Hepatitis A, Hepatitis B and or HPV vaccine, if client is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <http://www.health.state.ga.us/programs/immunization/publications.asp>.**

MANAGEMENT OF SEX PARTNERS

All sex partners (asymptomatic and symptomatic) should be treated with one of the above regimes.

FOLLOW UP

See every 1-2 weeks until all lesions have healed. Clinical response is

the best gauge of therapy.

CONSULTATION/REFERRAL

1. Inadequate response to treatment.
2. If lymph node enlargement continues to the point where rupture seems possible, refer for aspiration. (Blue color of overlying skin shows that rupture is imminent.)
3. If client presents to the health department with history and signs/symptoms that are suggestive of LGV, may need to consult with your **medical consultant. Health director should be notified so** that presumptive treatment **and surveillance** can be initiated.
4. **Public Health Employees must be familiar with reporting of possible sexual abuse if encountered through history, physical. All suspected sexual abuse must be reported to the county Department of Family and Children Services office as per guidelines for *Mandatory Reporting of Suspected Child Abuse for Public Health Personnel.***

REFERENCES

1. **Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010. (Current)**
2. **Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010. (Current)**
3. CDC, "MMWR Weekly", *Lymphogranuloma Venereum Among Men Who Have Sex with Men-Netherlands*, Article, 53 (42) pp. 985-988 October 29, 2004. **(Current)**
4. CDC, "Sexually Transmitted Diseases" *Lymphogranuloma Venereum (LGV) Project*, n.d., <<http://cdc.gov/std/lgv/default.htm>> (April 4, 2005). **(Current)**
5. **Georgia Department of Human Services, *Appearance of Rare Form of Chlamydia (LGV) in Atlanta. Health Officials stress safe sex practices among gay and bisexual men.*** <<http://health.state.ga.us/publications/pressrelease/021705.asp>> (April 28, 2011). **(Current)**
6. "Lexi-Comp Online," Lexi-Comp, Inc., <<http://online.lexi.com>> (March 11, 2011).

NURSE PROTOCOL FOR MUCOPURULENT CERVICITIS (MPC)

DEFINITION	<p>Clinical syndrome characterized by yellow or green mucopurulent exudate visible in the endocervical canal or in an endocervical swab specimen and/or easily induced endocervical bleeding.</p> <p>The desired outcome of client management is to determine, through laboratory testing, if she is infected with <i>N. gonorrhoeae</i> and/or <i>C. trachomatis</i> and treat her and her sex partners accordingly.</p>
ETIOLOGY	<p><i>Chlamydia trachomatis</i> and <i>Neisseria gonorrhoeae</i> may cause MPC, but most women infected with either do not have MPC. In most cases, neither organism can be isolated. In some cases, the condition persists despite repeated courses of antimicrobial therapy.</p>
SUBJECTIVE	<ol style="list-style-type: none">1. Frequently asymptomatic.2. Discharge from the vagina.3. Abnormal vaginal bleeding (e.g., after intercourse).
OBJECTIVE	<ol style="list-style-type: none">1. Presence of a purulent or mucopurulent exudate visible in the endocervical canal or in an endocervical swab specimen (positive swab test). <p style="text-align: center;">AND/OR</p> <ol style="list-style-type: none">2. Easily-induced bleeding occurs with insertion of the first endocervical swab (cervical friability).
ASSESSMENT	Mucopurulent Cervicitis (MPC)
PLAN	DIAGNOSTIC STUDIES <ol style="list-style-type: none">1. Gonorrhea and chlamydia tests.2. HIV antibody test to determine HIV status, if unknown. THERAPEUTIC <ol style="list-style-type: none">1. The results of the chlamydia and gonorrhea tests should be used to determine the need for treatment, unless the client is unlikely to be located for treatment when test results are available.2. Only if the clinic-based prevalence of chlamydia and/or gonococcal infection is more than 15-20%, and the client is unlikely to be easily located for treatment when the test results are

available, may empiric treatment to cover gonorrhea and/or chlamydia be given. (See gonorrhea and chlamydia protocols for treatment choices.)

CLIENT EDUCATION/COUNSELING

(Reinforce pertinent information with handouts)

1. The name of the syndrome and its significance.
2. When to call/return for test results.
3. Directions for taking medication and what to do about potential side effects.
4. Encourage self-referral of recent sex partner(s) for examination and possible treatment. Avoid sex until partner has been treated.
5. Abstain from sex for 7 days after therapy is begun.
6. **Hepatitis A, Hepatitis B and or HPV vaccine, if client is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <http://www.health.state.ga.us/programs/immunization/publications.asp>.**

MANAGEMENT OF SEX PARTNERS

1. All self-referred sex partners should be treated on the basis of their examination and test results, or the test results of the index client.
2. Partners of females who are treated for MPC before test results are available should receive treatment for the same suspected infection(s) as the female partner.

FOLLOW-UP

If symptoms persist, clients should return for re-evaluation. However, after the possibilities of relapse and reinfection have been excluded, management of persistent MPC is unclear.

CONSULTATION/REFERRAL

1. **Consult with or refer to primary care provider for additional evaluation if symptoms persist after relapse and reinfection have been excluded.**

2. **Public Health Employees must be familiar with reporting of possible sexual abuse if encountered through history, physical. All suspected sexual abuse must be reported to the county Department of Family and Children Services office as per guidelines for *Mandatory Reporting of Suspected Child Abuse for Public Health Personnel*.**

REFERENCES

1. **Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010. (Current)**
2. **Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010. (Current)**
3. **“Lexi-Comp Online,” Lexi-Comp, Inc., <<http://online.lexi.com>> (March 11, 2011).**

STANDARD NURSE PROTOCOL FOR NONGONOCOCCAL URETHRITIS (NGU)

DEFINITION Sexually transmitted clinical syndrome in men, usually characterized by a mucoid-to-purulent urethral discharge and often accompanied by dysuria or urethral itching. It is diagnosed if urethritis is present and Gram-negative intracellular organisms cannot be identified on Gram stains. May progress to epididymitis or Reiter's syndrome if untreated.

The desired outcome of treatment is alleviation of symptoms and microbiologic cure of infection.

ETIOLOGY *Chlamydia trachomatis* causes **15%-40%** of cases, with lower prevalence occurring in older men. The etiology of many cases of nonchlamydial NGU is unknown. *Ureaplasma urealyticum* and possibly *Mycoplasma genitalium* are implicated in as many as one third of cases (**15%-25%**). *Trichomonas vaginalis* and herpes simplex virus occasionally cause NGU.

SUBJECTIVE

1. Urethral discharge, especially in the morning.
2. Itching or burning of the urethra.

OBJECTIVE The following criteria are used to diagnose nongonococcal urethritis (NGU).

1. Documentation of urethritis by:
 - a. Mucopurulent or purulent discharge,
OR
 - b. Gram stain of urethral secretions demonstrating more than 5 WBCs per oil immersion field.
OR
 - c. **Positive leukocyte esterase test in a first void urine sediment demonstrating >10 WBCs per high power field.**
AND/OR
2. **When available a Gram stain that is negative for Gram-negative intracellular diplococci.**
3. **If the criteria for urethritis are not present, treatment should be deferred pending the results of the diagnostic studies. Empiric treatment of symptoms without documentation of urethritis is recommended only for clients at high risk for infection who are unlikely to return for a follow-up evaluation (e.g. Adolescents who have multiple partners, non**

compliance for follow up of previous positive results, etc.).

NOTE: If the client has urinated shortly before obtaining a specimen in which less than five (5) white blood cells (WBCs) per high power field are seen, may need to examine another specimen two hours after urination.

ASSESSMENT Nongonococcal Urethritis (NGU)

PLAN

DIAGNOSTIC STUDIES

1. Gonorrhea and Chlamydia tests.
2. **Hepatitis A, Hepatitis B and or HPV vaccine, if client is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <http://www.health.state.ga.us/programs/immunization/publications.asp>.**
3. HIV antibody test to determine HIV status, if unknown.

THERAPEUTIC

PHARMACOLOGIC

1. Azithromycin 1 gm PO, single dose,
OR
2. Doxycycline 100 mg PO, 2 times a day for 7 days if at least age 8.
OR
3. Erythromycin base 500 mg orally 4 times a day for 7 days
OR
4. Erythromycin ethylsuccinate 800 mg orally 4 times a day for 7 days
OR
5. Levofloxacin 500 mg orally, once daily for 7 days (if client is at least age 18)
OR
6. Ofloxacin 300 mg orally, 2 times a day for 7 days (if client is at least age 18)

CLIENT EDUCATION/COUNSELING

(Reinforce pertinent information with handouts)

1. The name of the syndrome and its significance.
2. Directions for taking medication and what to do about potential side effects.
3. Referral, for evaluation and treatment, of all sex partners within the preceding 60 days.
4. Assist client to develop a personalized STD/HIV risk reduction plan.
5. Instruct client to abstain from sexual intercourse until 7 days after therapy has started provided their symptoms have resolved and sex partners have been adequately treated.
6. **Hepatitis A, Hepatitis B and or HPV vaccine, if client is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <http://www.health.state.ga.us/programs/immunization/publications.asp>.**

MANAGEMENT OF SEX PARTNERS

All sex partners, as defined above, should be examined and promptly treated with one of the above regimens.

FOLLOW-UP

1. **Advise the client to return to clinic for all lab results even if presumptively treated at initial visit. Inform client if lab results are positive additional treatment will be needed.**
2. **Inform client if additional lab(s) is/are positive, partner(s) will need additional treatment also.**
3. The client should return if symptoms persist or return. Clients with persistent or recurrent urethritis should be retreated with the initial regimen if they have failed to comply with the regimen, or if they have been re-exposed to an untreated sex partner. Otherwise, refer.
4. **Retest client in three months.**

CONSULTATION/REFERRAL

1. If not compliant to previous treatment and instructions retreat and refer to Communicable Disease Specialist for counseling.
2. Refer to urologist for evaluation and treatment of recurrent urethritis.
3. Public Health Employees must be familiar with reporting of possible sexual abuse if encountered through history, physical. All suspected sexual abuse must be reported to the county Department of Family and Children Services office as per guidelines for *Mandatory Reporting of Suspected Child Abuse for Public Health Personnel*.

REFERENCES

1. Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010. (Current)
2. Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010. (Current)
3. "Lexi-Comp Online," Lexi-Comp, Inc., <<http://online.lexi.com>> (March 11, 2011).

STANDARD NURSE PROTOCOL FOR PEDICULOSIS PUBIS (Crabs/pubic lice)

DEFINITION Infestation of the pubic hair. (The pubic louse may also infest facial hair or eyelashes.) Lice deposit eggs (nits) on the hair shaft; nits hatch in one week. The desired outcome of treatment is to eliminate lice and nits from clients and their clothing and bedding.

ETIOLOGY Crab louse, *Phthirus pubis*, typically spread by sexual contact or sleeping in the same bed.

SUBJECTIVE

1. Itching in the pubic area.
2. "Bugs" or "crabs."

OBJECTIVE The following criteria are used to diagnose pediculosis pubis:

1. Identification of lice, larvae, or nits attached to genital hairs.

OR

2. History of exposure to pubic lice **AND** pruritic, reddened macules or papules or secondary excoriations are observed in the genital area.

ASSESSMENT Pediculosis Pubis (Crab or Pubic Lice)

PLAN

DIAGNOSTIC STUDIES

1. HIV antibody test to determine HIV status, if unknown.
2. **Hepatitis A, Hepatitis B and or HPV vaccine, if client is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <http://www.health.state.ga.us/programs/immunization/publications.asp>.**

THERAPEUTIC

PHARMACOLOGIC

NOTE: Prior to treatment of children, consult with or refer to primary care provider.

1. Either of these over-the-counter preparations:
 - a. Permethrin 1% cream rinse (e.g., NIX) applied to the affected area and washed off after 10 minutes;
NOTE: Clients who are breastfeeding will need to

discontinue until 72 hours after last treatment.

Do not give to ragweed sensitized persons.

NOTE: Must be at least 2 months of age.

OR

- b. Pyrethrins with Piperonyl Butoxide (e.g., RID) applied to the affected area and washed off after 10 minutes.

NOTE: Do not use in pregnant clients. Clients who are breastfeeding will need to consider discontinuing temporarily. Do not give to ragweed sensitized persons.

- 2. Mild topical antipruritic/anti-inflammatory cream or ointment may be obtained over-the-counter for itching.

3. Alternative Regimens (Consult physician prior to administering or dispensing to client)

- a. **If age is equal or greater than two years of age and weigh at least 15 kg give Ivermectin 200 mcg/kg orally, repeat in two weeks.**

NOTE: Clients who are breastfeeding will need to discontinue until 72 hours after last treatment.

OR

- b. **If age is equal or greater than six years of age give Malathion 0.5% lotion applied for 8-12 hours and then washed off.**

NOTE: Malathion lotion is flammable; clients must avoid heat sources (fire, hair, dryers, curling irons, etc).

NOTE: Clients who are breastfeeding will need to discontinue until 72 hours after last treatment.

NON-PHARMACOLOGIC MEASURES

Bedding and clothing should be decontaminated (i.e., either machine-washed with hot water, or machine-dried using the heat cycle or dry-cleaned) or removed from body contact for at least 72 hours.

CLIENT EDUCATION/COUNSELING

(Reinforce pertinent information with handouts)

1. The name and significance of the condition.
2. How to apply prescribed medication and decontaminate clothing and bedding. Fumigation of living areas is not necessary.
3. Tell all sex/bed partners from within the preceding month to obtain over the counter medication and complete treatment as soon as possible. Avoid sex or sleeping with untreated partners.

FOLLOW-UP

1. Reevaluate in one week if symptoms persist.
2. Re-treatment may be necessary if lice or eggs are found. If no response to one treatment, re-treat with another regimen.

CONSULTATION/REFERRAL

1. Consult with physician regarding any question of management.
2. **Public Health Employees must be familiar with reporting of possible sexual abuse if encountered through history, physical. All suspected sexual abuse must be reported to the county Department of Family and Children Services office as per guidelines for *Mandatory Reporting of Suspected Child Abuse for Public Health Personnel.***

REFERENCES

1. Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010. (Current)
2. Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010. (Current)
3. Mark Lebwohl, Lily Clark and Jacob Levitt, "Therapy for Head Lice Based on Life Cycle, Resistance, and Safety Considerations," *Pediatrics*, 2007, 119: 965-974. (Current)
4. "Lexi-Comp Online," Lexi-Comp, Inc., <<http://online.lexi.com>> (March 11, 2011).

STANDARD NURSE PROTOCOL FOR PELVIC INFLAMMATORY DISEASE (PID)

DEFINITION

The clinical syndrome resulting from the ascending spread of microorganisms from the vagina and endocervix to the endometrium, the fallopian tubes or to contiguous structures.

If untreated, acute infections may result in peritonitis caused by rupture of a tubo-ovarian abscess, and acute or subclinical infections may result in chronic pain, pelvic adhesions, involuntary infertility or ectopic pregnancy.

The intensity of symptoms may vary widely, from mild to acute. Many episodes of PID go unrecognized. Although some women may have asymptomatic PID, many have mild or non-specific symptoms or signs such as abnormal bleeding, dyspareunia or vaginal discharge. Experts recommend that providers maintain a low threshold of diagnosis for PID and recognize when PID should be suspected.

The desired outcome of treatment is to demonstrate substantial clinical improvement within 3 days after initiation of therapy, with subsequent resolution of all signs and symptoms.

ETIOLOGY

Sexually transmitted organisms, especially *Neisseria gonorrhoeae* and *Chlamydia trachomatis* are implicated in most cases of PID; however, organisms not usually associated with sexual transmission, such as anaerobes, Gram-negative facultative bacteria and streptococci may also be involved.

SUBJECTIVE

SYMPTOMS

1. Mild to moderate lower abdominal pain or tenderness.
2. Vaginal discharge **and/or abnormal bleeding**.
3. Fever and chills.
4. Anorexia, nausea.

HISTORY

1. May have a history of exposure to gonorrhoea or chlamydia.

2. May have a history of previous PID, recent insertion of an IUD, or onset of symptoms during the first 5-10 days of the menstrual cycle.

OBJECTIVE

The following criteria are used to diagnose pelvic inflammatory disease:

1. **A high index of suspicion must be kept in sexually active females.** Minimum criteria to institute empiric treatment in sexually active young females and other females at risk for STDs:

Cervical motion tenderness,

AND

Uterine/adnexal tenderness.

2. Additional criteria that support a diagnosis of PID include:
 - a. Abnormal cervical or vaginal mucopurulent discharge.
 - b. Presence of white blood cells (WBCs) on saline microscopy of vaginal secretions.
 - c. Laboratory documentation of cervical infection with *N. gonorrhoeae* or *C. trachomatis*.
 - d. **Oral temperature may be 101° F (38.3° C) or higher.**

NOTE: If the cervical discharge appears normal and no white blood cells are found on the wet prep, the diagnosis of PID is unlikely.

3. **Wet prep of vaginal fluid to detect presence of concomitant infection (e.g., BV and Trichomonas).**

ASSESSMENT

Pelvic Inflammatory Disease (PID)

PLAN

DIAGNOSTIC STUDIES

1. Tests for gonorrhea and chlamydia.
2. Pregnancy test if there is a possibility that client may be pregnant (see Consultation/Referral).
3. HIV antibody test to determine HIV status, if unknown.

THERAPEUTIC

PHARMACOLOGIC

NONPREGNANT ADULT/ADOLESCENT:

Ceftriaxone 250 mg IM, single dose,

PLUS

Doxycycline 100 mg PO, 2 times a day for 14 days (**only if at least age 8**),

PLUS

Metronidazole 500 mg PO, 2 times a day for 14 days may be added for coverage of anaerobic organisms. It will also effectively treat bacterial vaginosis (BV), which is frequently associated with PID.

NOTE: Metronidazole should not be used for treatment during the first trimester of pregnancy. Lactating women must be advised to withhold breastfeeding during treatment and for 12-24 hours after last dose to reduce child's exposure to metronidazole and doxycycline.

CLIENT EDUCATION/COUNSELING

(Reinforce pertinent information with handouts)

1. The name of the syndrome and its significance.
2. Directions for taking medication and what to do about potential side effects.
3. Return appointment for evaluation in 2-3 days.
4. Refer all sex partner(s) from within 60 days prior to the onset of symptoms to the current date, or the last partner if last sexual contact was prior to that, for examination and treatment. (Give written notes for clients to give to partners.)
5. Counsel to avoid sex with untreated partners.
6. Assist client to develop a personalized STD/HIV risk reduction plan.
7. **Instruct client to go to Emergency Room if symptoms worsen.**
8. **Hepatitis A, Hepatitis B and or HPV vaccine, if client is**

unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <http://www.health.state.ga.us/programs/immunization/publications.asp>.

MANAGEMENT OF SEX PARTNERS

All sex partners, **in contact with the client in the preceding 60 days**, should be examined for STDs and promptly treated with a regimen effective against both gonorrhea and chlamydia, regardless of symptoms or Gram stain or other test results. Male sex partners of females with PID caused by chlamydia or gonorrhea often are asymptomatic.

FOLLOW-UP

1. Evaluation, by bimanual examination, within 72 hours after initiation of therapy for symptomatic improvement. Also discuss medication compliance and stress importance of completing therapy.
2. Suggest repeat examination, and rescreening tests for gonorrhea and chlamydia, 4-6 weeks after completing therapy.

CONSULTATION/REFERRAL

1. Treatment must be instituted as soon as possible. If a referral is made to an APRN or MD to confirm the diagnosis, begin treatment before the referral is made, unless the APRN or MD is on-site and can see the client immediately.
2. Refer to a physician immediately, for possible hospitalization and/or parenteral treatment when:
 - a. Surgical emergencies such as appendicitis cannot be excluded.
 - b. The client is pregnant.
 - c. The client has failed to respond clinically to oral therapy.
 - d. The client is unable to follow or tolerate an outpatient oral regimen.
 - e. The client has signs of a severe illness, nausea and vomiting, or a high fever.
3. If client has an IUD, refer for possible removal and contraceptive counseling after medication has begun.
4. Refer to a District Communicable Disease Specialist (CDS) for contact follow-up.

5. **Public Health Employees must be familiar with reporting of possible sexual abuse if encountered through history, physical. All suspected sexual abuse must be reported to the county Department of Family and Children Services office as per guidelines for *Mandatory Reporting of Suspected Child Abuse for Public Health Personnel*.**

REFERENCES

1. Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010. (Current)
2. Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010. (Current)
3. "Lexi-Comp Online," Lexi-Comp, Inc., <<http://online.lexi.com>> (March 11, 2011).

STANDARD NURSE PROTOCOL FOR SCABIES IN ADULTS

DEFINITION

Infestation with the "itch mite" which penetrates the skin, creating visible papules, vesicles, or small, linear burrows, which contain the mites and their eggs. Common sites in adults include the flexor surface of the wrists, webbing between fingers, anterior axillary folds, the external genitalia, and the inner aspects of the upper thigh. In infants, other skin areas including the neck, face and scalp may be affected.

The predominant symptom is pruritus due to sensitization. It begins two to six weeks after the first infestation, sooner after subsequent infestations. Complications include excoriations and secondary infections due to scratching. The desired outcome of treatment is to eliminate the mites and relieve symptoms.

ETIOLOGY

Sarcoptes scabiei, the itch mite, which travels from body to body through close physical contact, sleeping in the same bed or sharing clothing. Lesions may be seen only in the genital and adjacent areas when spread sexually.

SUBJECTIVE

1. Severe itching, usually worse at night, associated with a "breaking out" or rash.
2. May have history of similar symptoms in other family members, playmates, or sexual partners.

OBJECTIVE

SIGNS

1. Burrows in the skin, appearing as finely-raised, wavy lines from a few millimeters to a centimeter in length.
2. Papules or vesicles.
3. Excoriations and possible signs of secondary infection from scratching.

PHYSICAL EXAMINATION/LAB FINDINGS

1. Gross or microscopic identification of mites, larva or eggs on scraping from papules or burrows.

OR

2. Burrows in the skin or characteristic pruritic, erythematous, papular eruptions, and other causes of dermatitis are excluded.
3. Diagnosis is suggestive in a person who has had sexual or other

close physical contact to a person infested with scabies and has compatible skin lesions.

ASSESSMENT Scabies

PLAN **DIAGNOSTIC STUDIES**

1. HIV antibody test to determine HIV status, if unknown.
2. **Hepatitis A, Hepatitis B and or HPV vaccine, if client is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <http://www.health.state.ga.us/programs/immunization/publications.asp>.**

THERAPEUTIC

PHARMACOLOGIC

1. Nonpregnant, nonlactating clients
 - a. Permethrin 5% Cream (i.e., Elimite), single application. Thoroughly massage into all skin from the neck down to the soles of the feet, avoiding contact with mucous membranes, eyes and mouth. Remove by washing after 8-14 hours.
NOTE: Must be at least 2 months of age or older.
OR
 - b. **If age is equal or greater than 2 years of age and weigh at least 15 kg. Ivermectin 200 mcg/kg orally, repeated in 2 weeks.**
NOTE: Clients who are breastfeeding will need to discontinue until 72 hours after last treatment.
OR
 - c. Lindane 1% lotion (1 oz) or cream (30 gm), single application to all skin areas from neck down and thoroughly washed off in 8 hours.
NOTE: Lindane is not recommended as first-line therapy because of toxicity. Use only as an alternative due to inability to tolerate other therapies or if other therapies have failed. All clients must be provided a medication guide. Do not use Lindane:
 - Immediately after bath or shower,
 - If client has extensive dermatitis,
 - In pregnant women **or** lactating women,
 - **In children less than 2 years of age,**
 - In those who weigh less than 110 pounds,

- If client has uncontrolled seizures.
2. Pregnant or lactating females
(Treat only if clearly indicated; consider discontinuing breastfeeding temporarily.)
Permethrin 5% Cream, as above.
 3. For relief of itching, suggest an over the counter oral antihistamine such as Benadryl tablets or liquid, with dosage appropriate to age.
 4. Bacitracin ointment (OTC) for mild secondary infection.

NON-PHARMACOLOGIC MEASURES

1. **Bedding and clothing should be decontaminated (i.e., either dry cleaned or machine-washed and dried using the hot cycle) or removed from body contact for at least 72 hours. Fumigation of living areas is unnecessary.**
2. Keep fingernails clean and well-trimmed to minimize secondary infection from scratching.
3. Bathe in cool water using a mild soap.

CLIENT EDUCATION/COUNSELING

(Reinforce pertinent information with handouts.)

1. The name of the condition and its significance.
2. Directions for use of medication.
3. That itching may persist for weeks even after successful treatment. Over the counter, Hydrocortisone cream or Benadryl cream may relieve persistent itching.
4. That all close personal or **household contacts** and sex partners within the preceding month need examination and treatment.
5. Encourage HIV antibody testing if not already done.

FOLLOW-UP

Reexamine in 1 week. Retreatment can be considered after 1–2 weeks for clients who are still symptomatic or if live mites are present. Treatment with an alternative regimen (i.e., Lindane) is recommended for persons who do not respond to the recommended treatment.

CONSULTATION/REFERRAL

1. Repeated failure to respond to treatment.
2. Severe secondary infection.
3. **Refer Infants younger than 2 months of age to primary care physician for evaluation and treatment or refer to the Standard Nurse Protocol for Scabies in Infants, Children and Adolescents.**
4. **Public Health Employees must be familiar with reporting of possible sexual abuse if encountered through history, physical. All suspected sexual abuse must be reported to the county Department of Family and Children Services office as per guidelines for *Mandatory Reporting of Suspected Child Abuse for Public Health Personnel*.**

REFERENCES

1. Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010. (Current)
2. Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010. (Current)
3. “Lexi-Comp Online,” Lexi-Comp, Inc., <<http://online.lexi.com>> (March 11, 2011).

STANDARD NURSE PROTOCOL FOR SYPHILIS, EARLY SYMPTOMATIC (PRIMARY and SECONDARY)

- DEFINITION** The symptomatic stages occurring during the first year of untreated syphilis infection.
- The primary stage is characterized by a painless, indurated ulcer (chancre) that appears at the site(s) of sexual exposure in about 21 days (range of 10-90 days) and lasts from 1 to 5 weeks before spontaneously healing.
- The secondary stage, which usually appears 1 to 5 weeks after the primary chancre is healed, is characterized by a variety of skin or mucous membrane rashes or other type lesions. They will disappear spontaneously within 2 to 6 weeks, but may recur within the year.
- The desired outcome of case management is to **ensure curing** the infection in the client and prevent development of infection in sexual partners exposed within the preceding 90 days, and in a fetus.
- ETIOLOGY** *Treponema pallidum*, a spirochete. The primary chancre and certain moist lesions (condyloma lata or mucous patches) of secondary syphilis are very contagious and sexual contact when such lesions are present is the usual mode of transmission.
- SUBJECTIVE** **SYMPTOMS**
- A. Primary Syphilis:
1. Painless open sore, at a site of sexual exposure.
 2. Localized, non-tender swollen glands.
- B. Secondary Syphilis: Has one or more of the following:
1. Rash on the body and/or extremities.
 2. Growths/lesions in the anogenital region.
 3. Hair falling out.
 4. Swollen glands.
 5. Sores in the mouth.
 6. Fever, malaise.

OBJECTIVE

SIGNS

- A. Primary Syphilis:
1. Painless ulcer (chancre) with an indurated border and relatively smooth base, at a site of sexual exposure, e.g., genitals, anus, mouth.
 2. Localized firm, non-tender, enlarged lymph nodes.
- B. Secondary Syphilis (one or more of the following is present):
1. Bilaterally symmetrical macular or papular, nonpruritic rash on body and/or extremities. May be only on the palms and soles (palmar/plantar).
 2. Condyloma lata (large moist papules, usually in the genital and/or anal region or mouth).
 3. Patchy hair loss on scalp, eyebrows or eyelashes.
 4. Generalized enlarged lymph nodes.
 5. Mucous patches in the mouth or on the cervix.

PHYSICAL EXAM/ LAB FINDINGS

- A. Primary Syphilis
1. Identification of *T. pallidum* on darkfield microscopic exam of serum from a chancre is definitive.
OR
 2. Typical ulcer (chancre),
AND
 - a. A newly-reactive RPR, confirmed by a reactive treponemal EIA, FTA-ABS or TPPA,
OR
 - b. A four-fold or greater increase over the last known RPR titer in a person with a previous history of syphilis is presumptive.
- NOTE:** Persons with a typical ulcer, a newly-reactive STAT RPR and no history of previous syphilis may be treated for primary syphilis prior to the results of the treponemal test being available.
3. A typical ulcer and exposure to a known case of early syphilis in the previous 10-90 days is suggestive of primary

syphilis.

- B. Secondary Syphilis
1. Identification of *T. pallidum* on darkfield microscopic exam of lesion material is definitive.
OR
 2. Typical signs (e.g., rash, mucous patches)
AND
 - a. Newly-reactive RPR, with titer 1:8 or above, confirmed by a treponemal test,
OR
 - b. A four-fold increase over the last known titer in a person with a previous history of syphilis is presumptive.
 3. Typical dermatologic signs and exposure to a known case of early syphilis in the past six months is suggestive of secondary syphilis.
- C. HIV-infected clients
While abnormal serologic findings (unusually high, unusually low, and fluctuating titers) have been observed in HIV infected persons who also have syphilis, both treponemal and non-treponemal serologic tests can be interpreted in the usual manner for most co-infected clients. Neurosyphilis should be considered in HIV-infected clients with neurologic symptoms.

ASSESSMENT Primary Syphilis
OR
Secondary Syphilis

PLAN **DIAGNOSTIC STUDIES**

1. RPR titer, if not already done.
2. HIV antibody test to determine HIV status, if unknown.

THERAPEUTIC

PHARMACOLOGIC

NOTE: If Benzathine Penicillin G is in short supply, reserve existing penicillin for pregnant and HIV- infected clients.

1. If client is neither pregnant nor HIV-infected
 - a. Benzathine Penicillin G, 2.4 million units (mu) IM, once. Unless Benzathine Penicillin G is in short supply then follow 1b regimen.
 - OR**
 - b. If history of allergy to penicillin, Doxycycline 100 mg PO, 2 times a day for 14 days.
NOTE: Do not give doxycycline to lactating client; client must decide to discontinue breastfeeding or receive alternative regimen.
2. If client is pregnant or HIV-infected,
 - a. Benzathine Penicillin G, 2.4 million units IM, once.
 - OR**
 - b. If history of allergy to penicillin, the client must be referred for skin testing and possible desensitization and subsequent treatment with penicillin.

CLIENT EDUCATION/COUNSELING

(Reinforce pertinent information with handouts)

1. The name of the infection and its significance.
2. If given oral medication, directions for taking it and possible side effects and what to do about them.
3. The possibility of a Jarisch-Herxheimer reaction and what to do about it. (If pregnant, seek medical care immediately if notice a change in fetal movement or uterine contractions.)
4. The need for, and schedule of, follow-up blood tests.
5. The need for examination **and treatment** of sex partners and avoidance of sex with untreated partners. Introduce them to the Communicable Disease Specialist who will assist them.
6. Assist client to develop a personalized STD/HIV risk reduction plan.

7. Refer all pregnant clients to OBGYN physician.
8. Hepatitis A, Hepatitis B and or HPV vaccine, if client is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <http://www.health.state.ga.us/programs/immunization/publications.asp>.

MANAGEMENT OF SEX PARTNERS

1. Contacts to Primary Syphilis
Examine and treat, with one of the regimens listed above, all referred partners exposed within 3 months of onset, or since onset, of symptoms.
2. Contacts to Secondary Syphilis
 - a. Examine all referred partners exposed within 6 months of onset, or since onset, of symptoms.
 - b. Treat (with one of the regimens listed above):
All those exposed within the preceding 3 months, regardless of examination and serologic test results, and those exposed more than 3 months ago if serologic test results are not immediately available and follow-up is uncertain.

FOLLOW-UP

1. Monitor compliance if taking doxycycline.
2. Schedule a routine appointment for a clinical evaluation and repeat RPR in 3 to 6 months, and then at 12 months.
3. If pregnant, clinical evaluation and RPRs should be done at least during the third trimester and at delivery. Monthly RPR titers may be indicated for women at high risk for reinfection.
4. If HIV infected, monitor RPR titers at 3-month intervals for a year, and then at 24 months.
5. Clinical and RPR titer response should be appropriate for the stage of disease. RPR titers may decline more slowly for clients who previously had syphilis. **Notify physician if a, b and/or c occurs:**
 - a. If signs or symptoms persist or recur, or if a sustained four-

fold increase in titer compared to the baseline or maximum titer occurs, the client probably failed treatment or was reinfected. The client should be re-treated and reevaluated for HIV infection **and/or re-exposure**. A cerebral spinal fluid (CSF) exam also should be performed.

- b. If titers have not declined fourfold by 6 months, the client should be reevaluated for HIV infection. If further clinical and serologic follow up cannot be assured, re-treatment should be given.
- c. In either instance above, re-treatment should consist of three weekly doses of benzathine penicillin 2.4 million units IM, unless CSF exam indicates that neurosyphilis is present.

CONSULTATION/REFERRAL

1. If signs or symptoms of neurologic or ophthalmic disease.
2. For penicillin-allergy skin testing and desensitization, as necessary.
3. For CSF exam in instances noted previously.
4. All primary and secondary syphilis cases should be referred to a Communicable Disease Specialist for further counseling and sex partner referral.
5. **Public Health Employees must be familiar with reporting of possible sexual abuse if encountered through history, physical. All suspected sexual abuse must be reported to the county Department of Family and Children Services office as per guidelines for *Mandatory Reporting of Suspected Child Abuse for Public Health Personnel*.**

REFERENCES

1. Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010. (Current)
2. Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010. (Current)
3. CDC, "Case Definitions for Infectious Conditions under Public Health Surveillance," *Morbidity and Mortality Weekly Report*, Vol. 46, No. RR-10, May 2, 1997. (Current)
4. "Lexi-Comp Online," Lexi-Comp, Inc., <<http://online.lexi.com>> (March 11, 2011).

NURSE PROTOCOL FOR LATENT SYPHILIS (EARLY, LATE AND UNKNOWN DURATION)

- DEFINITION** The intervals in the course of untreated syphilis infection, after the primary stage, are characterized by seroreactivity without other evidence of disease. Diagnosis is dependent upon proper interpretation of serologic test results, history of contact to syphilis and/or history of previous signs and symptoms.
- Persons who have latent syphilis acquired within the preceding year are classified as having early latent (EL) syphilis. The desired outcome of case management of early latent syphilis is to cure the infection in the client and prevent development of infection in sexual partners exposed within the preceding 90 days, and in a fetus.
- Late latent (LL) syphilis is defined as being of more than 1 year's duration. The desired outcome of treatment of late latent syphilis is to prevent the occurrence or progression of late complications.
- Persons are assessed as having latent syphilis of unknown duration when they do not meet the criteria for early latent syphilis, but time of acquisition of infection is unknown. (This may be only a temporary diagnosis until sex partners can be evaluated.)
- ETIOLOGY** *Treponema pallidum*, a spirochete. Unless there are hidden lesions present during the early latent periods, the infection can only be spread through contact with infected blood, such as transplacentally from mother to unborn child.
- SUBJECTIVE** 1. No current symptoms.
2. May have a history of symptoms (lesions, rashes, etc.) suggestive of primary or secondary syphilis.
3. May have a history of sexual contact with a known case of syphilis.
- OBJECTIVE** The following criteria are used to diagnose latent syphilis:
1. Early Latent Syphilis
- a. No clinical symptoms or signs,
 AND
- b. Reactive RPR and confirmatory tests,
 AND
- c. Has had, within the past year:
- 1) A nonreactive serologic test, OR a four-fold titer

- increase on serial RPR tests,
OR
 - 2) Symptoms consistent with primary or secondary syphilis,
OR
 - 3) Sexual exposure to a known case of primary, secondary or early latent syphilis.
2. Late Latent Syphilis
- a. No clinical symptoms or signs,
AND
 - b. Reactive RPR and confirmatory tests,
AND
 - c. The criteria for having acquired the infection within the preceding 12 months (see early latent syphilis above) are not met.
3. Latent Syphilis of Unknown Duration
- a. No clinical symptoms or signs,
AND
 - b. Reactive RPR and confirmatory tests,
AND
 - c. The criteria for early latent syphilis (see above) are not met.

ASSESSMENT Early Latent Syphilis
OR
Late Latent Syphilis
OR
Latent Syphilis of Unknown Duration

PLAN

DIAGNOSTIC STUDIES

- 1. Careful re-examination of all accessible mucosal surfaces (i.e., the oral cavity, the female perineum, and underneath the foreskin in uncircumcised males) to evaluate for internal mucosal lesions.
- 2. HIV antibody test to determine HIV status, if unknown.
- 3. **Review Appointment Card Signs/Symptoms of Neurosyphilis with client, if any found, refer to physician.**

THERAPEUTIC

PHARMACOLOGIC

1. **Early Latent Syphilis**
 - a. If client is not pregnant, allergic to penicillin, nor HIV-infected and neurosyphilis (see appointment card on page 8.72) is ruled out

- 1) **Benzathine Penicillin G, 2.4 million units IM, once.**

OR

- 2) **If allergic to penicillin, consult a physician to recommend alternative treatment.**

NOTE: Physician may recommend one of the following treatments to penicillin allergic clients:

- 1) **Doxycycline 100 mg PO, 2 times a day for 14 days (Only if not pregnant and signs and symptoms of neurosyphilis are ruled out)**

OR

- 2) **Refer to allergist for desensitization and therapy if client is pregnant, and/or HIV infected, or has signs and symptoms of neurosyphilis. Allergist should consult and Infectious Disease specialist if Neurosyphilis is suspected.**

2. **Late Latent Syphilis or Latent Syphilis of Unknown Duration**

- a. If client is **not** pregnant, **allergic to penicillin**, nor HIV-infected and does not have neuropsychiatric signs and/or symptoms

- 1) **Benzathine Penicillin G, 2.4 million units IM, weekly for 3 doses (7.2 million units total).**

NOTE: An interval of up to 10-14 days between doses may occur without re-starting the sequence of injections

OR

- 2) **If allergic to penicillin, and neurosyphilis has been ruled out, Doxycycline 100 mg PO, 2 times a day for 28 days, with careful monitoring for compliance.**

NOTE: Lactating clients taking doxycycline

must discontinue breastfeeding or receive alternative regimen.

OR

- 3) If client has a history of allergy to penicillin, refer for skin testing and possible desensitization, with subsequent treatment with benzathine penicillin.

REMINDER: If Benzathine Penicillin G is in short supply, reserve existing penicillin for pregnant and HIV-infected clients. For non-pregnant and/or non-HIV-infected clients: Doxycycline 100 mg PO, 2 times a day for 28 days.

- b. If client is pregnant and does not have neuropsychiatric signs and/or symptoms
 - 1) Benzathine Penicillin G, 2.4 million units IM, weekly for 3 doses (7.2 million units total).
NOTE: Pregnant clients who miss any dose of therapy, scheduled at 7-day intervals, must restart the sequence of injections.
- OR**
- 2) If client has a history of allergy to penicillin, refer for skin testing and possible desensitization, with subsequent treatment with benzathine penicillin.

CLIENT EDUCATION/COUNSELING

(Reinforce pertinent information with handouts.)

1. The name of the infection and its significance.
2. If given oral medication, directions for taking it and possible side effects and what to do about them.
3. The possibility of a Jarisch-Herxheimer reaction if has early syphilis and what to do about it. (If pregnant, seek medical care immediately if notice a change in fetal movement or uterine contractions.)
4. The need for, and schedule of, follow-up blood tests.
5. For early latent syphilis and syphilis of unknown duration, the need for examination of sex partners and avoidance of sex with untreated partners. Introduce clients to the communicable disease specialist who will assist them with partner notification.

6. For late latent syphilis and syphilis of unknown duration without neuropsychiatric signs/symptoms, give client information sheet containing signs and symptoms of neurosyphilis with instructions on when to return.
7. Development of a personalized STD/HIV risk reduction plan.
8. **Review Appointment Card Signs/Symptoms of Neurosyphilis with client.**
9. **Refer pregnant clients to OBGYN physician for prenatal care.**
10. **Hepatitis A, Hepatitis B and or HPV vaccine, if client is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <http://www.health.state.ga.us/programs/immunization/publications.asp>.**

MANAGEMENT OF SEX PARTNERS

1. Contacts to Early Latent Syphilis and Latent Syphilis of Unknown Duration
 - a. Examine all referred partners from the previous year.
 - b. Treat (with one of the above single dose or 14 day regimens) all those exposed within the preceding 3 months, regardless of examination and serologic test results, and those exposed more than 3 months ago if serologic test results are not immediately available and follow-up is uncertain.
2. Contacts to Late Latent Syphilis
 - a. Evaluate steady (e.g., marital) sex partners. No treatment is needed unless the partner is shown to be infected.
 - b. Children born to an infected female within the past few years should also be evaluated.

FOLLOW-UP (All latent syphilis)

- 1 Repeat RPR at 6, 12, and 24 months. If titers increase fourfold, if an initially high titer (at least 1:32) fails to decline at least fourfold within 12 to 24 months, or if the client develops signs or symptoms attributable to syphilis, evaluate for possible neurosyphilis and re-treat appropriately.
2. If the client is HIV-infected, repeat RPR at 6, 12, 18 and 24

months. If signs or symptoms of syphilis recur, if signs or symptoms of neurosyphilis develop, or if titers rise fourfold, refer client for CSF (cerebrospinal fluid) exam and re-treat accordingly.

CONSULTATION/REFERRAL

1. All clients who have neuropsychiatric signs and/or symptoms to a physician.
2. All HIV-infected clients in late latent syphilis and/or syphilis of unknown duration to a physician.
3. To a physician for skin testing for penicillin allergy, and possible desensitization, as necessary.
4. All latent syphilis cases should be referred to a Communicable Disease Specialist for further counseling and sex partner referral.
5. **Public Health Employees must be familiar with reporting of possible sexual abuse if encountered through history, physical. All suspected sexual abuse must be reported to the county Department of Family and Children Services office as per guidelines for *Mandatory Reporting of Suspected Child Abuse for Public Health Personnel*.**
6. **Refer pregnant clients to OBGYN physician for prenatal care.**

NOTE: The following appointment card depicts some of the symptoms and signs of Neurosyphilis.

<p>Client Health Information:</p> <p>You have been treated for a Late Syphilis infection. This infection is curable if treated properly. It is very important that you return for treatment as discussed by the doctor or nurse to cure the infection and prevent progression of the infection.</p> <p>To ensure the infection has been cured, it is important that you repeat blood work every:</p> <ul style="list-style-type: none"> ▪ 6 months (after initial treatment) ▪ 12 months (for follow-up) ▪ 24 months (for further follow-up) <p>Return to:</p> <p>PLACE HEALTH CLINIC LABEL HERE ABC Health Dept 123 Health Way Treat Infection, State 12345</p> <p>On the following Dates:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Date</th> <th>Treatment</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table> <p>If you are having complications, have been re-exposed to this infection or feel you are having signs and symptoms, please return as soon as possible.</p>	Date	Treatment									<p>If you or someone else notices you are having any of these signs and/or symptoms, you should return to the clinic or report to your primary care physician right away.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Memory Loss <input type="checkbox"/> Problems with Mental Function <input type="checkbox"/> Unsteady Walking <input type="checkbox"/> Balance Problems (Dizziness or Faint) <input type="checkbox"/> Urinary Problems (Can't Hold Pee) <input type="checkbox"/> Bowel Problems (Can't hold bowel movements) <input type="checkbox"/> Vision Problems (Blurred vision, loss of vision) <input type="checkbox"/> Eye Pain <input type="checkbox"/> Problems Having Sex <input type="checkbox"/> Numbness or Loss of Feeling in Legs <input type="checkbox"/> Stiff Neck <input type="checkbox"/> Headache <input type="checkbox"/> Fever <input type="checkbox"/> Loss of Hearing <input type="checkbox"/> Persistent Nausea and Vomiting (Always throwing up) <input type="checkbox"/> Seizures <input type="checkbox"/> Stroke <input type="checkbox"/> Unexplained Episodes of Severe Pain
Date	Treatment										

Appointment Card



PLACE HEALTH CLINIC LABEL HERE
ABC Health Dept
123 Health Way
Treat Infection, State 12345
(404) 555-1212

REFERENCES

1. Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010. (Current)
2. Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010. (Current)
3. CDC, "Case Definitions for Infectious Conditions under Public Health Surveillance," *Morbidity and Mortality Weekly Report*, Vol. 46, No. RR-10, May 2, 1997. (Current)
4. "Lexi-Comp Online," Lexi-Comp, Inc., <<http://online.lexi.com>> (March 11, 2011).

STANDARD NURSE PROTOCOL FOR TRICHOMONIASIS

DEFINITION

A genitourinary infection that is usually sexually transmitted. Vaginal trichomonas has been associated with adverse pregnancy outcomes, particularly premature rupture of the membranes, preterm delivery, and low birthweight. **High risk populations include (1) those with multiple sex partners, (2) those with a history of STDs, (3) those that exchange sex for payment and use injecting drugs.**

The desired outcomes of treatment of clients and sex partners are relief of symptoms, microbiologic cure, and reduction of transmission.

ETIOLOGY

Trichomonas vaginalis, a protozoa with an undulating membrane and flagella.

SUBJECTIVE

1. May be asymptomatic, especially in males. **In males, may present as Non Gonococcal Urethritis.**
2. Female symptoms may include:
 - a. Vaginal discharge with an offensive odor.
 - b. Vulvar irritation.

OBJECTIVE

SIGNS

1. May be none.
2. Profuse, yellow-green malodorous vaginal discharge.
3. Vulvar inflammation with edema or excoriations.
4. Cervix may have a granular appearance with punctate hemorrhages ("strawberry cervix").

LABORATORY FINDINGS (with or without signs)

1. Typical motile trichomonads seen on wet mount of vaginal discharge. **(Yield: 60% to 70%)**
OR
2. Identification of *T. vaginalis* on culture.
OR
3. Identification of Trichomonas on pap smear.

NOTE: If Trichomonas is identified on pap smear, may treat presumptively or refer to PMD.

ASSESSMENT Trichomoniasis

PLAN **DIAGNOSTIC STUDIES**

1. HIV antibody test to determine HIV status, if unknown.
2. **Hepatitis A, Hepatitis B and or HPV vaccine, if client is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <http://www.health.state.ga.us/programs/immunization/publications.asp>.**

THERAPEUTIC

PHARMACOLOGIC

1. If client is not pregnant
 - a. Metronidazole 2 gm PO, in a single dose.
 - OR**
 - b. Metronidazole 500 mg PO, 2 times a day for 7 days.
2. If client is pregnant (second and third trimester only)
Metronidazole 2 gm PO, in a single dose.

NOTE: Metronidazole should not be used for treatment during the first trimester of pregnancy (see Consultation/Referral). Lactating women taking metronidazole should withhold breastfeeding during treatment and for 12-24 hours after the last dose to reduce child's exposure to the drug.

CLIENT EDUCATION/COUNSELING

(Reinforce pertinent information with handouts)

1. The name of the infection and its significance.
2. Directions for taking medication and list of possible side effects.
3. Avoid alcohol-containing products within 24 hours of treatment.
4. Refer sex partner(s) for examination and treatment and avoid sex until partner has been treated.
5. Assist client to develop a personalized STD/HIV risk reduction plan.

6. Lactating women taking metronidazole should withhold breastfeeding during treatment and for 12-24 hours after the last dose to reduce child's exposure to the drug.

MANAGEMENT OF SEX PARTNERS

All sex partners (asymptomatic and symptomatic) should be examined and treated promptly with one of the above regimens.

FOLLOW-UP

Client should return only if symptoms persist after treatment, or recur. Re-treat with the 7-day regimen of metronidazole if 4-6 weeks have elapsed since previous treatment and presence of trichomonas has been reconfirmed (see medication package insert).

CONSULTATION/REFERRAL

1. Refer pregnant clients in first trimester who have tested positive for trichomoniasis to their primary care physician.
2. Consult with physician if client is allergic to metronidazole for desensitization referral.
3. Repeated treatment failure. (Assure that partner(s) have been treated, to rule out reinfection.)
4. **Public Health Employees must be familiar with reporting of possible sexual abuse if encountered through history, physical. All suspected sexual abuse must be reported to the county Department of Family and Children Services office as per guidelines for *Mandatory Reporting of Suspected Child Abuse for Public Health Personnel.***

REFERENCES

1. Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010. (Current)
2. Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010. (Current)
3. "Lexi-Comp Online," Lexi-Comp, Inc., <<http://online.lexi.com>> (March 11, 2011).

**STANDARD NURSE PROTOCOL FOR
UNCOMPLICATED VULVOVAGINAL CANDIDIASIS (VVC)
(Yeast infection)**

DEFINITION	A common vulvo-vaginal infection that may occasionally also cause cutaneous penile lesions in male sex partners, but is not always considered to be an STD. An estimated 75% of women will experience at least one episode of VVC during their life-time, and 40-45% will have two or more episodes. The desired outcome of treatment is the relief of symptoms.
ETIOLOGY	<p>Most infections are caused by <i>Candida albicans</i> which grows as oval budding yeast cells and pseudohyphae and thrives best when the vaginal pH is 4.5 to 5. Other <i>Candida</i> species or yeasts may occasionally be causes.</p> <p>Many women are asymptomatic. Symptoms are caused by overgrowth of normally occurring yeast forms. Contributing factors, which disrupt the normally protective vaginal flora include: treatment with antibiotics, diabetes, HIV infection and other immuno-suppressive conditions.</p>
SUBJECTIVE	<ol style="list-style-type: none">1. Vulvovaginal itching.2. Vaginal discharge.3. May have vaginal soreness, pain with intercourse, vulvar burning and external dysuria.4. Redness and swelling of the vulva.
OBJECTIVE	DIAGNOSTIC CRITERIA <ol style="list-style-type: none">1. Pruritis and erythema in the vulvovaginal area. A thick white, cottage cheese like vaginal discharge may be present. Vaginal pH less than 4.5. AND2. Identification of typical budding yeast or pseudohyphae on microscopic exam of vaginal discharge, by saline or adding 10% KOH solution to wet mount.
ASSESSMENT	Vulvovaginal Candidiasis (VVC)
PLAN	DIAGNOSTIC STUDIES <ol style="list-style-type: none">1. HIV antibody test to determine HIV status, if unknown.

2. **Hepatitis A, Hepatitis B and or HPV vaccine, if client is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <http://www.health.state.ga.us/programs/immunization/publications.asp>.**

THERAPEUTIC

PHARMACOLOGIC

NOTE: During pregnancy, use only topical intravaginal azole therapies, applied for 7 days (1.a. – c. below).

1. Intravaginal agents

Pregnant clients:

- a. *Clotrimazole 1% cream, 5 gm, one applicatorful intravaginally for 7 days

Non-pregnant clients:

- a. *Butoconazole 2% cream, 5 gm, one applicatorful intravaginally for 3 days

OR

- b. *Clotrimazole 1% cream, 5 gm, one applicatorful intravaginally for 7-14 days

OR

- c. *Miconazole 100 mg vaginal suppository, **one suppository** for 7 days,

OR

- d. *Miconazole 200 mg vaginal suppository, **one suppository** for 3 days,

OR

- e. *Miconazole 2% cream, 5 gm, one applicatorful intravaginally for 7 days

OR

- f. Nystatin 100,000-unit vaginal tablet, **one** tablet intravaginally for 14 days,

OR

- g. *Tioconazole 6.5% ointment, 5 gm, intravaginally in a single application,

OR

- h. Terconazole 0.4% cream 5 gm, one applicatorful intravaginally for 7 days

OR

- i. **Terconazole** 80 mg vaginal suppository, **one suppository for 3 days**

OR

- j. **Terconazole 0.8% cream 5 gm, one applicatorful, intravaginally for 3 days.**

*Available without a prescription.

OR

2. Oral agent:
May use in adolescents, if not pregnant or a nursing mother.

Fluconazole (Diflucan) 150 mg PO, once.

NON-PHARMACOLOGIC MEASURES

Keep irritated **vulvovaginal area** as clean and dry as possible.

CLIENT EDUCATION/COUNSELING

(Reinforce pertinent information with handouts)

1. The significance of the condition.
2. Directions for treatment.
3. Although many preparations of intravaginal agents are available without a prescription, self-medication is advised only for women who have been previously diagnosed with VVC and who experience a recurrence of the same symptoms.
4. Butoconazole and clotrimazole cream, tioconazole ointment, and miconazole creams and suppositories are oil-based and may weaken latex condoms and diaphragms **and other methods of contraception should be used.**
5. If taking fluconazole (Diflucan), noticeable improvement in symptoms may not occur for a few days. Even with a single dose, nausea, vomiting, diarrhea, abdominal pain and headache may occur.

MANAGEMENT OF SEX PARTNERS

No routine exam and/or treatment is necessary, but may be considered in females with recurrent infections. **A** minority of male **sex** partners who have balanitis, characterized by erythematous areas on the glans of the penis in conjunction with pruritus or irritation. **These men** benefit from treatment with over-the-counter topical antifungal agents to relieve

symptoms.

FOLLOW-UP

Only if symptoms persist or recur within 2 months of the initial symptoms.

CONSULTATION/REFERRAL

1. Refer clients with frequent recurrent episodes not responding to usual therapy. Women who experience four (4) or more episodes of VVC within a year are described as having Recurrent Vulvovaginal Candidiasis (RVVC). Risk factors include uncontrolled diabetes mellitus, immunosuppression, and corticosteroid use, but most women who have RVVC have no apparent predisposing conditions. Intensive therapy for 10-14 days, followed by a maintenance regimen for at least 6 months, may be indicated.
2. **Public Health Employees must be familiar with reporting of possible sexual abuse if encountered through history, physical. All suspected sexual abuse must be reported to the county Department of Family and Children Services office as per guidelines for *Mandatory Reporting of Suspected Child Abuse for Public Health Personnel.***

REFERENCES

1. Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010. (Current)
2. Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010. (Current)
3. "Lexi-Comp Online," Lexi-Comp, Inc., <<http://online.lexi.com>> (May 2, 2011).

THIS PAGE INTENTIONALLY LEFT BLANK