# STANDARD NURSE PROTOCOLS FOR SEXUALLY TRANSMITTED DISEASES (STD)

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#### **GENERAL INFORMATION**

#### **DISEASE PRESENTATIONS AS:**

- Lesions: Primary Syphilis, Genital Herpes (HSV), Lymphogranuloma Venereum(LGV)
- **Discharge:** Bacterial Vaginosis (BV), Vulvovaginal Candidiasis, Gonorrhea (GC), Chlamydia (CT), Pelvic Inflammatory Disease (PID), Epididymitis, Nongonococcal Urethritis (NGU), Mucopurulent Cervicitis (MPC), Trichomoniasis
- **Rashes:** Secondary Syphilis, Scabies, Pediculosis Pubis, Gonorrhea (Disseminated Gonococcal Infection), Genital Herpes

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#### 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 **patient** 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. Mucoid, 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. GC culture or amplified DNA Probe remains the preferred method for diagnosis.

- 1. Adult Endocervical, Urethral, Rectal, or Pharyngeal 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 inhouse on symptomatic male clients in an effort to make a diagnosis and treat the **patients** on the same day.

**NOTE:** You must perform either "a" or "b" in female **patients**. In male **patients**, 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.
- **ASSESSMENT** Gonorrhea [specify exposed site(s): by clinical assessment].

#### 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 **agar** culture **plate**, when indicated, examples are:
  - a. GISP study if ongoing
  - b. Suspected therapeutic failure after Gonorrhea treatment.
  - c. **Symptomatic** adults with oral and/or rectal exposure should have cultures done at the exposed sited.
  - d. In children with suspected sexual abuse, do oral and rectal cultures regardless of history exposure.
  - e. As requested by a physician, or supervisor when Nucleic Hyridization test are not available

## NOTE: Gen-Probe NAAT can be used for the above example listed as "c" if agar culture plate is not available.

# NOTE: If suspected therapeutic failure after GC treatment an agar culture plate must be used for specimen collection.

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.

#### THERAPEUTIC

#### PHARMACOLOGIC

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).

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

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

- A. Cervical, Urethral, or Rectal Infection of nonpregnant adults/adolescents or children weighing at least 45 kilograms (kg):
  - Recommended Regimen (First Line treatment): Ceftriaxone 250 mg IM, single dose, 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 patient(s); patient(s) must be advised to discontinue breastfeeding or receive alternative regimen. Breastfeeding can be restarted 2 days after completion of treatment.

2. If referral for desensitization is unavailable or **patient** refuses,

Azithromycin 2 gm PO once, given with food to lessen occurrence of GI symptoms. **PLUS**, Test-of-cure in 1 week

- B. Cervical, Urethral, or Rectal 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 **patient** refuses,

Azithromycin 2 gm PO once, given with food to lessen occurrence of GI symptoms. PLUS, Test-of-cure in 1 week

**C.** Pharyngeal Infection of nonpregnant adults/adolescents or children weighing at least 45 kilograms (kg):

#### **RECOMMENDED REGIMEN (FIRST LINE TREATMENT):**

Ceftriaxone 250 mg IM, single dose, **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 patient(s); patient(s) must be advised to discontinue breastfeeding or receive alternative regimen. Breastfeeding can be restarted 2 days after completion of treatment.

- **D.** Pharyngeal Infection of Pregnant adult/adolescent or children weighing at least 45 kg:
  - Ceftriaxone 250 mg IM, single dose, PLUS, Azithromycin 1 gm PO, single dose,
  - 2) If referral for desensitization is unavailable or **patient** refuses,

Azithromycin 2 gm PO once, given with food to lessen occurrence of GI symptoms. **PLUS,** Test-of-cure in 1 week

E. 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: <u>http://www.cdc.gov/std/gisp</u>

Co-treatment for Gonorrhea and Chlamydia, with appropriate drugs and dosage, reduces antimicrobial resistance and enhances pharyngeal treatment of Gonorrhea. F. HIV infected patients should receive the same treatment regimen as those who are HIV negative.

#### PATIENT 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. Education and counseling of the correct usage of protective barriers (condoms, dental dams, etc.).

- 5. Assist **patient** to develop a personalized STD/HIV risk reduction plan. Abstain from sex until all the symptoms are resolved and partner(s) are tested and treated.
- 6. If treated with an alternative regimen, the **patient** should return 1 week after treatment for a test-of-cure at the infected anatomic site. A culture should be done when available.
- 7. Advise the **patient** to return to clinic for all lab results even if presumptively treated at initial visit. Inform **patient** if lab results are positive additional treatment may be needed.
- 8. Advise **patient** to return to clinic in 7 days or less if symptoms do not resolve.
- 9. Inform **patient** if additional lab(s) is/are positive, partner(s) will need additional treatment also.
- 9. HIV antibody test to determine HIV status, if unknown.
- 10. Hepatitis A, Hepatitis B and or HPV vaccine, if **patient** is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <u>http://www.health.state.ga.us/programs/immunization/publications.as</u> <u>p</u>.

#### MANAGEMENT OF SEX PARTNERS

All sex partners, as defined above, should be examined and promptly treated with the recommended regimen. Only use alternative regimen if the first-line treatment regimen is not available followed by a test-of-cure in 1 week.

#### FOLLOW-UP

- 1. Persons who have uncomplicated gonorrhea and treated with the recommended treatment regimen need not return for retesting unless symptoms are unresolved. Those treated with an alternative treatment regimen (Azithromycin tablets 2 gm PO) are to return in 1 week for retesting (TOC). If retest is positive, consult with **medical director and contact STD Nurse Consultant**.
- 2. Test-of-cure is not routinely recommended with first-line treatment regimen unless therapeutic failure is suspected. Apparent treatment or therapeutic failure: Question carefully about the possibility of reinfection. A **patient** with symptoms that persist after treatment and reinfection is ruled out should have a gonorrhea culture done, with anti-microbial sensitivity testing on a positive culture. If gonorrhea culture is not available, a second NAAT test can be performed 7 days after treatment. **The Gen-Probe APTIMA 2 test is a dual performance test, GC results should be the only test assessed once results return. When a patient is adequately treated for positive chlamydia and a 2<sup>nd</sup> test is conducted within two weeks of treatment the Gen-<b>Probe APTIMA 2 chlamydia lab results may return positive**.
- 3. *N. gonorrhoeae* infection is prevalent among **patients** 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 **patient** education and referral of sex partners. Clinicians should advise **patients** with gonorrhea to be retested three months after treatment. If **patients** do not seek medical care for retesting in three months, providers are encouraged to test these **patients** whenever they next seek medical care within the following 12 months, regardless of whether the **patients** believe that their sex partners were treated. Retesting is distinct from test-of-cure to detect therapeutic failure, which is not recommended if **patient** receives first line of treatment.

#### CONSULTATION/REFERRAL

- 1. Refer to a District Communicable Disease Specialist 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 **patient** to a physician if **patient** cannot tolerate cephalosporins, penicillins, or azithromycin.
- 4. If **patient** is treated **with an alternative** regimen and has a positive retest consult with **medical director and contact STD Nurse Consultant.**
- 5. Children allergic to cephalosporins or penicillins for desensitization or alternate treatment.
- 6. Public Health Employees must be familiar with procedures for reporting possible sexual or physical abuse of children if encountered through history or physical. All suspected sexual or physical abuse of children 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 exposed to infected mothers during vaginal delivery must be referred to pediatrician for evaluation and possible treatment.
- 8. Patients with acute arthritis, skin pustules, meningitis or eye infection should be referred for evaluation, treatment and follow up.
- 9. Consult medical director when further medical guidance is needed and standing protocol is not applicable for therapeutic treatment of patient.

#### 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., <<u>http://online.lexi.com</u>> (May 2, 2013)
- 5. GA Department of Community Health, Guidelines for **Mandatory** Reporting of Suspected Child Abuse for Public Health Personnel, Oct 2010, Pg. 1-9.
- Centers for Disease Control and Prevention, Update to CDC's Sexually Transmitted Diseases Treatment Guidelines, 2010: Oral Cephalosporins No Longer a Recommended Treatment for Gonococcal Infections, MMWR, Vol. 61(31), 590-594, August 10, 2012.(Current)
- 7. Medscape: Dr. Robert Kircaldy, M.D., MPH, New Treatment Guidelines for Gonorrhea Antibiotic **Change:** CDC Expert commentary 201208-13

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#### 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.

Chlamydia screening of sexually active women less than 26 years of age is recommended. The primary focus of screening is to detect the infection and prevent complications.

- **ETIOLOGY** *Chlamydia trachomatis*, a bacteria.
- **SUBJECTIVE** 1. Frequently asymptomatic **in both men and women.** 
  - 2. Females may have a history of:
    - a. Discharge from vagina.
    - b. Bleeding after intercourse.
    - c. Dysuria
  - 3. Males may have a history of:
    - a. Urethral discharge.
    - b. Itching of urethral meatus.
    - c. Burning on urination.
    - d. Pain or swelling of testicles
  - 4. Anal symptoms
    - a. Pain
    - b. Discharge or bleeding
- **OBJECTIVE** 1. Many show no clinical signs.
  - 2. Females
    - a. Mucoid to mucopurulent endocervical discharge.
    - b. Cervical ectopy/friability.

- 3. Males
  - a. Mucoid to mucopurulent urethral discharge.
  - b. Redness at urethral meatus.

#### 4. Anal symptoms

- a. Pain
- b. Discharge or bleeding
- 5. Positive urethral, endocervical, **anal, oral,** or urine test (amplification, culture, DNA probe) for Chlamydia *trachomatis.* **NOTE: N**onculture, 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, **less than 45 kg**, consult with or refer to primary care provider.

#### **RECOMMENEDED REGIMEN**

- 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 patient(s); patient(s) must be advised to discontinue breastfeeding or receive alternative regimen. Breastfeeding can be restarted 2 days after completion of treatment. Do not give to children under the age of 8.

#### **RECOMMENDED REGIMEN**

- 2. If pregnant:
  - a. Azithromycin 1 gm PO, single dose, **OR**
  - b. Amoxicillin 500 mg PO, 3 times a day for 7 days,

#### ALTERNATIVE REGIMEN

a. Erythromycin base 500 mg PO, 4 times a day for 7 days,

OR

b. Erythromycin base 250 mg PO, 4 times a day for 14 days,

OR

- c. Erythromycin Ethylsuccinate 800 mg PO, 4 times a day for 7 days, **OR**
- d. Erythromycin Ethylsuccinate 400 mg PO, 4 times a day for 14 days.
- 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.
- 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.
- 5. HIV positive patients should receive the same treatment regimen as those who are HIV negative.

#### PATIENT 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. Women who are breastfeeding should not receive Doxycycline. If Doxycycline is given to breastfeeding women they should discontinue breastfeeding during the duration of treatment and can resume breastfeeding two days after completion of treatment. If breastfeeding women are pumping during treatment, they should not provide pumped breast milk to infant during duration of treatment nor two days after completion of treatment.
- 5. Counsel the **patient** about high risk of reinfection if **patient**'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).
- 6. Educate patients who receive Azithromycin about adverse effects (QT Prolongation, torsades de pointes, etc.) and document the patient's understanding.
- Abstain from intercourse until 7 days after taking azithromycin or until the 7 day Doxycycline regimen has been completed.
   Abstain from sex till sex partner(s) have been treated.
- 8. Advise the patient(s) to return to clinic for all lab results. Inform patient(s) if lab results are positive additional treatment may be needed.
- 9. Education and counseling of the correct usage of protective barriers (condoms, dental dams, etc.).
- 10. Assist patient to develop a personalized STD/HIV risk reduction plan and document patient plan.
- 11. Hepatitis A, Hepatitis B and/or HPV vaccine, if patient is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <u>http://www.health.state.ga.us/programs/immunization/publications</u>. .asp
- 12. HIV antibody test to determine HIV status, if unknown.

#### MANAGEMENT OF SEX PARTNERS

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.

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 **the next time the** person(s) presents for medical care in the 12 months following initial treatment.

#### CONSULTATION/REFERRAL

- 1. If pregnant **patient** cannot tolerate medication.
- 2. Signs of Bartholin gland abscess/cyst.
- 3. Prior to treatment of children, **less than** 45 **kg** consult with or refer to primary care provider.
- 4. Public Health Employees must be familiar with procedures for reporting possible sexual or physical abuse of children if encountered through history or physical. All suspected sexual or physical abuse of children 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*, which may be viewed on

the Public Health Information Library (PHIL) at <a href="http://www.dphphil.org/policy">http://www.dphphil.org/policy</a>

5. Consult delegating physician when further medical guidance is needed and standard protocol is not applicable for therapeutic treatment of patient.

#### 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) "Lexi-Comp Online," Lexi-Comp, Inc., <<u>http://online.lexi.com</u>> (March 11, 2013)

#### STANDARD NURSE PROTOCOLS FOR BACTERIAL VAGINOSIS (BV)

# **DEFINITION** The clinical result of the replacement of the normal *Lactobacillus* 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.

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.

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.

- **ETIOLOGY** High concentrations of anaerobic bacteria (e.g., *Prevotella* species and *Mobiluncus* species), *Gardnerella vaginalis*, and *Mycoplasma hominus*.
- **SUBJECTIVE** Vaginal discharge, with an offensive odor that is often most noticeable after intercourse.
- **OBJECTIVE** The following criteria are used to diagnose bacterial vaginosis.
  - 1. At least 3 of the following 4 are present (Amsel's Diagnostic Criteria):
    - a. Homogeneous, white, non-inflammatory discharge that smoothly coats the vaginal walls.
    - b. The pH of vaginal secretions is higher than 4.5.
    - c. A "fishy" odor of vaginal discharge, before or after mixing it with 10% KOH (positive "whiff" test).
    - d. "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. **Amsel's Diagnostic Criteria (**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 is a **FDA Category B drug. Metronidazole should only be used in confirmed 2<sup>nd</sup> and 3<sup>rd</sup> trimester** of pregnancy. Lactating women taking metronidazole should withhold breastfeeding during treatment and for 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.

#### **RECOMMENDED REGIMEN**

If patient 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,

#### ALTERNATIVE REGIMEN

a. Clindamycin 300 mg PO, 2 times a day for 7 days.

#### **RECOMMENDED REGIMEN**

If **patient** is pregnant beyond 1<sup>st</sup> trimester,

a. Metronidazole 250 mg PO, 3 times a day for 7 days (during 2<sup>nd</sup> or 3<sup>rd</sup> trimesters only).

#### ALTERNATIVE REGIMEN

a. Clindamycin 300 mg PO, 2 times a day for 7 days.

#### PATIENT 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 **patients** regarding discontinuance of breastfeeding **for the same length of time**.
- **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. Education and counseling of the correct usage of protective barriers (condoms, dental dams, etc.).
- 5. BV is associated with high recurrence placing women at higher risk of other STDs.
- 6. Advise the patient to return to clinic for all lab results. Inform patient if lab results are positive additional treatment may be needed.
- 7. Instruct **patient** to return for reevaluation if symptoms persist.
- 8. HIV antibody test to determine HIV status, if unknown.
- 9. Hepatitis A, Hepatitis B and or HPV vaccine, if **patient** is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <u>http://www.health.state.ga.us/programs/immunization/publications</u> .asp.

#### FOLLOW-UP

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

Note: Clinical cure is the resolution of all symptoms (Amsel's Diagnostic Criteria) 21-30 days after treatment.

#### CONSULTATION/REFERRAL

- 1. Refer to **OB/GYN** if (three or more) recurrences **within 6 months** that do not respond to alternative treatment regimens.
- 2. Public Health Employees must be familiar with procedures for reporting of possible sexual abuse of children if encountered through history, physical. All suspected sexual abuse of children 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*, which may be viewed on the Public Health Information Library (PHIL) at <u>http://www.dphphil.org/policy</u>.
- 3. Consult physician for repeated visit for BV for long term therapy.
- 4. Consult delegating physician when further medical guidance is needed and standing protocol is not applicable for therapeutic treatment of patient.

#### REFERENCES

- 1. Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010.
- 2. Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010.
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#### 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 **patient**s 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 asymptomatic.
- 2. May be none.
- 3. Profuse, yellow-green malodorous vaginal discharge.
- 4. Vulvar inflammation with edema or excoriations.
- 5. Cervix may have a granular appearance with punctate hemorrhages ("strawberry cervix").
- 6. **Itching and burning in vaginal area.**
- 5. **Dysuria**

LABORATORY FINDINGS (with or without signs)

- 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 **P**ap smear.

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

NOTE: NAATs transcription-medicated amplification (TMA) or PCR are diagnostic options for testing men. Consult with your District Administration and GPHL about the availability of testing and processing. This diagnostic test option is not available through the STD Department.

- **ASSESSMENT** Trichomoniasis
- PLAN DIAGNOSTIC STUDIES
  - 1. Wet Preparation (saline, 10% KOH).

#### THERAPEUTIC

#### PHARMACOLOGIC

- 1. If **patient** 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.
- If patient is pregnant (confirmed second and third trimester only) Metronidazole 2 gm PO, in a single dose.
- 3. If patient is HIV positive treat with Metronidazole 500mg PO, 2 times a day for 7 days.

NOTE: Metronidazole is a FDA Category B drug. Metronidazole should only be used in confirmed 2<sup>nd</sup> and 3<sup>rd</sup> 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.

#### PATIENT 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 all sex partner(s) from within 60 days prior to the onset of symptoms or diagnosis of trichomoniasis 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.
- 5. Advise the client to return to clinic for all lab results even if presumptively treated at initial visit. Inform patient if lab results are positive additional treatment may be needed.
- 6. Education and counseling of the correct usage of protective barriers (condoms, dental dams, etc.).
- 7. Avoid sex until partner(s) has been treated.
- 8. Assist client to develop a personalized STD/HIV risk reduction plan and document clients plan.
- 9. 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.
- 10. HIV antibody test to determine HIV status, if unknown.
- 11. Hepatitis A, Hepatitis B and or HPV vaccine, if patient is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <u>http://www.health.state.ga.us/programs/immunization/publica</u> <u>tions.asp</u>.

#### MANAGEMENT OF SEX PARTNERS

All sex partners **within 60 days** (asymptomatic and symptomatic) should be examined and treated promptly with one of the above regimens.

#### **FOLLOW-UP**

**Patient** 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 trichomona**d**s has been reconfirmed (see medication package insert).

#### CONSULTATION/REFERRAL

- 1. Refer pregnant **patients** in first trimester who have tested positive for trichomoniasis to their primary care physician.
- 2. Consult with physician if **patient** is allergic to metronidazole for desensitization referral **and HIV state of patient**.
- 3. Repeated treatment failure. (Assure that partner(s) have been treated, to rule out reinfection.).
- 4. Public Health Employees must be familiar with procedures for reporting possible sexual or physical abuse of children if encountered through history or physical. All suspected sexual or physical abuse of children 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*, which may be viewed on the Public Health Information Library (PHIL) at http://www.dphphil.org/policy
- 5. Consult delegating physician when further medical guidance is needed and standard protocol is not applicable for therapeutic treatment of patient.

#### REFERENCES

- 1. Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010. (Current)
- Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010. (Current)
  "Lexi-Comp Online," Lexi-Comp, Inc., <<u>http://online.lexi.com</u>> (March 11, 2013).

#### 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** Most infections are caused by *Candida albicans* which grows as oval budding yeast cells and pseudohyphae and thrives best when the vaginal pH is 4.5 to 5. Other *Candida* species or yeasts may occasionally be causes.

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.

- **SUBJECTIVE** 1. Vulvovaginal itching.
  - 2. **Thick, curdy v**aginal discharge.
  - 3. May have vaginal soreness, pain with intercourse, vulvar burning and external dysuria.
  - 4. Redness and swelling of the vulva.

#### OBJECTIVE DIAGNOSTIC CRITERIA

- Pruritis and erythema in the vulvovaginal area. A thick white, cottage cheese like vaginal discharge may be present.
   AND/OR
- 2. Vaginal pH less than 4.5. **AND/OR**
- 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 NOTE: HIV positive women are prone to recurrent candidiasis.

#### 1. Wet preparation (10% KOH, saline)

#### THERAPEUTIC

#### PHARMACOLOGIC

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

1. Intravaginal agents

#### **Pregnant patients:**

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

#### Non-pregnant patients:

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

#### OR

- \*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

 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.

#### PATIENT 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.
- 6. Education and counseling of the correct usage of protective barriers (condoms, dental dams, etc.).
- 7. Assist patient to develop a personalized STD/HIV risk reduction plan and document patients plan.
- 8. Advise the patient to return to clinic for all lab results even if presumptively treated at initial visit. Inform patient if lab results are positive additional treatment may be needed.
- 9. HIV antibody test to determine HIV status, if unknown.

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

#### 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 **patients** 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. **HIV status of the patient, if known, needs to be provided to the consulting physician.**
- 2. Public Health Employees must be familiar with procedures for reporting possible sexual or physical abuse of children if encountered through history or physical. All suspected sexual or physical abuse of children 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*, which may be viewed on the Public Health Information Library (PHIL) at <u>http://www.dphphil.org/policy</u>.
- 3. Consult delegating physician when further medical guidance is needed and standard protocol is not applicable for therapeutic treatment of patient.
- 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, March 2, 2013. (Current)3. "Lexi-Comp Online," Lexi-Comp, Inc., <<u>http://online.lexi.com</u>> (March 2, 2013).

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#### 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.
- 5. Dyspareunia

#### HISTORY

1. May have a history of exposure to gonorrhea 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. Pelvic examination for cervical motion tenderness, uterine tenderness, or adnexal tenderness.
- 3. Pelvic examination for cervical exudates or cervical friability.
- 4. Wet Preparation (saline, 10% KOH)
- 5. Pregnancy test if there is a possibility that **patient** may be pregnant (see Consultation/Referral).

#### THERAPEUTIC

#### PHARMACOLOGIC

#### NONPREGNANT ADULT/ADOLECENT:

#### **RECOMMENDED REGIMEN**

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.

#### ALTERNATIVE REGIMEN

Ceftriaxone 250 mg IM, single dose,

# PLUS

Clindamycin 450 mg PO, 4 times a day for 14 days, 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 is a FDA Category B drug. Metronidazole should only be used in confirmed 2<sup>nd</sup> and 3<sup>rd</sup> trimester of pregnancy. 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 24 hours after last dose to reduce child's exposure to metronidazole and Doxycycline.

#### PATIENT 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 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.
- 5. Counsel to avoid sex with untreated partners.
- 6. Education and counseling of the correct usage of protective barriers (condoms, dental dams, etc.).
- 7. Assist **patient** to develop a personalized STD/HIV risk reduction plan.
- 8. Instruct **patient** to go to Emergency Room if symptoms worsen.
- 9. Advise the patient to return to clinic for all lab results even if presumptively treated at initial visit. Inform patient if lab results are positive additional treatment may be needed.
- 10. HIV antibody test to determine HIV status, if unknown.
- 11. Hepatitis A, Hepatitis B and or HPV vaccine, if patient is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <u>http://www.health.state.ga.us/programs/immunization/publications</u>. .asp.

# MANAGEMENT OF SEX PARTNERS

All sex partners, in contact with the **patient** 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 **clients diagnosed with** gonorrhea and chlamydia, 3-6 months 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 **patient** is pregnant.
  - c. The **patient** has failed to respond clinically to oral therapy.
  - d. The **patient** is unable to follow or tolerate an outpatient oral regimen.
  - e. The **patient has** signs of a severe illness, nausea and vomiting, or a high fever.
- 3. If **patient** has an IUD, refer for possible removal and contraceptive counseling after medication has begun.
- 4. Public Health Employees must be familiar with procedures for reporting possible sexual or physical abuse of children if encountered through history or physical. All suspected sexual or physical abuse of children 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*, which may be viewed on the Public Health Information Library (PHIL) at <u>http://www.dphphil.org/policy.</u>
- 5. Consult delegating physician when further medical guidance is needed and standard protocol is not applicable for therapeutic treatment of patient.

- 1. Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010.
- 2. Erratum: *MMWR*, Vol. 59, RR-12, March 2, 2013.
- 3. "Lexi-Comp Online," Lexi-Comp, Inc., <<u>http://online.lexi.com</u>> (March 2, 2013).

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#### STANDARD NURSE PROTOCOL FOR EPIDIDYMITIS, SEXUALLY TRANSMITTED

**DEFINITION** 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).

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).

- **ETIOLOGY** Common causes are *Chlamydia trachomatis* or *Neisseria gonorrhoeae*. *Escherichia coli* and *Pseudomonas spp.* Infection can occur in males who are the insertive partners during anal intercourse. **Sexually** transmitted acute epididymitis usually is accompanied by urethritis, which frequently is asymptomatic.
- **SUBJECTIVE** 1. Scrotal pain and swelling, usually unilateral.
  - 2. May have dysuria and/or urethral discharge.
  - 3. No history of trauma to the area.
- OBJECTIVE1.Scrotal tenderness and swelling observed during<br/>assessment. Inability to differentiate epididymis from testicle<br/>during palpation (see consultation and referral)

AND

2. Gram-stain 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 Neisseria gonorrhoeae.

#### OR

3. Microscope examination of first-void urine sediment demonstrating more than 10 polymorphonuclear leukocytes per high **power field**, **OR** 

)R

4. **Positive leukocyte esterase test on first-void urine.** 

**ASSESSMENT** Epididymitis, sexually transmitted

#### PLAN DIAGNOSTIC STUDIES

- 1. Tender scrotal swelling and on palpation cannot distinguish epididymis from testicle (see consultation and referral).
- 2. When available, Gram-stain smear from urethra in males for Gonorrhea and for presumptive diagnosis of gonococcal infection
- 3. Laboratory tests for gonorrhea and chlamydia, Nucleic Acid hybridization tests and/or gonorrhea culture.
- 4. If the Gram-stain is negative or unavailable, positive leukocyte esterase test or microscopic examination of first-void uncentrifuged urine for leukocytes.

#### THERAPEUTIC

#### PHARMACOLOGIC

1. If most likely due to gonococcal or chlamydial infection:

#### **RECOMMENDED REGIMEN**

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.

#### ALTERNATIVE REGIMEN

Ceftriaxone 250mg IM, single dose, PLUS Tetracycline 500mg PO, 4 times daily for 10 days.

- 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 **patient** is at least age 18), **OR**
  - b. Levofloxacin 500 mg PO, once daily for 10 days (if **patient** is at least age 18).
- 3. **Over-the-counter** oral analgesics for pain.

# NON-PHARMACOLOGIC MEASURES

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

#### PATIENT EDUCATION/COUNSELING

(Reinforce pertinent information with handouts)

- 1. The name of the syndrome and its significance, **and any** 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. **Patient (s) symptoms should start improving within 48 hours of the initiation of treatment.**
- 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 **patient** and partner(s) no longer have symptoms.
- 6. Education and counseling of the correct usage of protective barriers (condoms, dental dams, etc.).
- 7. Assist **patient** to develop a personalized STD/HIV risk reduction plan.
- 8. Emphasize **patient** follow up in 3 days for re-evaluation (if date of follow up falls on a weekend, have patient return for re-evaluation the next open clinic day).
- 9. Emphasize the importance for **patient** to return to clinic for all lab results even if presumptively treated at initial visit. Inform **patient** if lab results are positive **and** additional treatment will be needed.

# 10. If additional laboratory tests are positive for STI (e.g. gonorrhea), partners will need treatment also.

11. HIV antibody test to determine HIV status, if unknown.

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

#### MANAGEMENT OF SEX PARTNERS

If gonorrhea and/or chlamydial infection is known, or suspected, in the index **patient**, 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. **Refer i**mmediately if unable to perform the necessary diagnostic testing, cannot be treated with recommended drugs or when emergency **evaluation** for testicular torsion **is** indicated.
- 2. If the diagnosis is questionable or if the patient has intense pain refer to an urologist, even when urethritis is documented by Gram stain.
- 3. If no improvement in 3 days **refer to an urologist or physician**.
- 4. Public Health Employees must be familiar with procedures for reporting possible sexual or physical abuse of children if encountered through history or physical. All suspected sexual or physical abuse of children 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*, which may be viewed on the Public Health Information Library (PHIL) at <u>http://www.dphphil.org/policy.</u>
- 5. Consult physician if unable to perform the necessary diagnostic testing immediately, patient cannot be treated with recommended drugs, or when emergency evaluation for testicular torsion is indicated.

- 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) "Lexi-Comp Online," Lexi-Comp, Inc., <<u>http://online.lexi.com</u>> (March 11, 2013).

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#### NURSE PROTOCOL FOR MUCOPURULENT CERVICITIS (MPC)

**DEFINITION** 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.

The desired outcome of **patient** client management is to determine, through laboratory testing, if she is infected with *N. gonorrhoeae* and/or *C. trachomatis* and treat her and her sex partners accordingly.

- **ETIOLOGY** *Chlamydia trachomatis* and *Neisseria gonorrhoeae* 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.
- **SUBJECTIVE** 1. Frequently asymptomatic.
  - 2. Discharge from the vagina.
  - 3. Abnormal vaginal bleeding (e.g., after intercourse).
- **OBJECTIVE** 1. Presence of a purulent or mucopurulent exudate visible in the endocervical canal or in an endocervical swab specimen (positive swab test).

#### AND/OR

- 2. Easily-induced bleeding occurs with insertion of the first endocervical swab (cervical friability).
- **ASSESSMENT** Mucopurulent Cervicitis (MPC)

#### PLAN DIAGNOSTIC STUDIES

- 1. Gonorrhea and chlamydia tests.
- 2. Presence of a purulent or mucopurulent exudate visible in the endocervical canal or in an endocervical swab specimen (positive swab test). AND/OR
- 3. Easily-induced bleeding occurs with insertion of the first endocervical swab (cervical friability).
- 4. Wet Preparation (saline, 10%KOH)

#### THERAPEUTIC

- 1. The results of the chlamydia and gonorrhea tests should be used to determine the need for treatment, unless the **patient** is unlikely to be located for treatment when test results are available.
- 2. If the patient is unlikely to be easily located for treatment when the test results are available, may empirically treat to cover gonorrhea and/or chlamydia be given. (See gonorrhea and chlamydia protocols for treatment choices.)

#### PATIENT EDUCATION/COUNSELING

(Reinforce pertinent information with handouts)

- 1. The name of the syndrome and its significance.
- 2. Advise the patient to return to clinic for all lab results even if presumptively treated at initial visit. Inform patient if lab results are positive additional treatment may be needed.
- 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. Assist patient in developing a personalized STD/HIV risk reduction plan and document patients plan.
- 7. Education and counseling of the correct usage of protective barriers (condoms, dental dams, etc.).
- 8. HIV antibody test to determine HIV status, if unknown.
- 9. Hepatitis A, Hepatitis B and or HPV vaccine, if **patient** is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <a href="http://www.health.state.ga.us/programs/immunization/publications.asp">http://www.health.state.ga.us/programs/immunization/publications.asp</a>.

#### 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 **patient.**
- 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, **patient**s should return for re-evaluation. However, after the possibilities of relapse and reinfection have been excluded, management of persistent MPC is unclear.

If the chlamydia or gonorrhea test is positive, patients 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. 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 procedures for reporting possible sexual or physical abuse of children if encountered through history or physical. All suspected sexual or physical abuse of children 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*, which may be viewed on the Public Health Information Library (PHIL) at <u>http://www.dphphil.org/policy.</u>
- 3. Consult delegating physician when further medical guidance is needed and standard protocol is not applicable for therapeutic treatment of patient.

- 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., <<u>http://online.lexi.com</u>> (March 11, 2013).

#### 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

 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 **patient** has urinated **within 2 hours** 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 **and before patients urinates again**.

ASSESSMENT Nongonococcal Urethritis (NGU)

#### PLAN DIAGNOSTIC STUDIES

- **1.** Gonorrhea and Chlamydia tests.
- 2. Documentation of urethritis by:
  - a. Mucopurulent or purulent discharge, OR
    - 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

3. When available a Gram stain that is negative for gramnegative intracellular diplococci.

# THERAPEUTIC

#### PHARMACOLOGIC

#### **RECOMMENDED REGIMEN**

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.

#### ALTERNATIVE REGIMEN

- 1. Erythromycin base 500 mg orally 4 times a day for 7 days, OR
- Erythromycin ethylsuccinate 800 mg orally 4 times a day for 7 days,

#### OR

3. Levofloxacin 500 mg orally, once daily for 7 days (if client is at least age 18),

#### OR

4. Ofloxacin 300 mg orally, 2 times a day for 7 days (if client is at least age 18).

#### PATIENT 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. Education and counseling of the correct usage of protective barriers (condoms, dental dams, etc.).
- 5. Advise the patient to return to clinic for all lab results even if presumptively treated at initial visit. Inform patient if lab results are positive additional treatment may be needed.
- 6. Assist **patient** to develop a personalized STD/HIV risk reduction plan.
- 7. Instruct **patient** to abstain from sexual intercourse until **at least** 7 days after therapy has started. **The partner(s) must be adequately treated and the treated patient's** symptoms **completely** resolved and sex partners have been adequately treated.
- Hepatitis A, Hepatitis B and or HPV vaccine, if patient is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <u>http://www.health.state.ga.us/programs/immunization/publications</u>.
- 9. HIV antibody test to determine HIV status, if unknown.

#### MANAGEMENT OF SEX PARTNERS

All sex partners, **within the preceding 60 days** should be examined and promptly treated with one of the **recommended regimens**.

#### **FOLLOW-UP**

1. Advise the **patient** to return to clinic for all lab results even if presumptively treated at initial visit. Inform **patient** if lab results are positive additional treatment will be needed.

- 2. Inform **patient** if additional lab(s) is/are positive, partner(s) will need additional treatment also.
- 3. The **patient** should return if symptoms persist or return **within three month of treatment**. **Patient** s 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 **to physician**.
- 4. Clinicians should advise patients with positive chlamydia or gonorrhea tests to be retested three months after treatment. If patients do not seek medical care for retesting in three months, providers are encouraged to test these patients whenever they next seek medical care within the following 12 months, regardless of whether the patients believe that their sex partners were treated. Retesting is distinct from test-ofcure to detect therapeutic failure, which is not recommended if patient receives first line of treatment.

# CONSULTATION/REFERRAL

- 1. If not compliant to previous treatment and instructions retreat and refer to Communicable Disease Specialist for counseling.
- 2. Refer to urologist or primary care physician for evaluation and treatment of 3 or more recurrent urethritis within three months. Referral should also be considered if client is experiencing pain for more than 3 months within a 6-month period.
- 3. Public Health Employees must be familiar with procedures for reporting possible sexual or physical abuse of children if encountered through history or physical. All suspected sexual or physical abuse of children 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*. which may be viewed on the Public Health Information Library (PHIL) at <u>http://www.dphphil.org/policy.</u>
- 3. Consult delegating physician when further medical guidance is needed and standard protocol is not applicable for therapeutic treatment of patient.

- 1. Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010.
- 2. Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010.
- 3. "Lexi-Comp Online," Lexi-Comp, Inc., <<u>http://online.lexi.com</u>> (March 4, 2013).

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#### 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 **patient** 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. **Patients**, 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. **Patient** 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: MIF and LGV serotype are to be submitted to a private laboratory for processing. Georgia Public Health Laboratory does not conduct testing to diagnose LGV. The STD Office provides only treatment and the cost for the MIF and LGV lab should be discussed with administration prior to collection of specimens.

- 1. Positive microimmunofluroscent (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(s) present: darkfield exam, if available and herpes culture.

# THERAPEUTIC

#### PHARMACOLOGIC

- 1. If **patient** is not pregnant:
  - a. Doxycycline 100 mg PO, 2 times a day for 21 days, NOTE: Do not give Doxycycline to lactating patient(s); patient(s) must be advised to discontinue breastfeeding or receive alternative regimen and 2 days after completion of

#### treatment. OR

- b. If **patient cannot** take Doxycycline, Erythromycin base 500mg PO, 4 times a day for 21 days.
- 2. If **patient** 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.

# PATIENT 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 **60** days prior to the development of symptoms for examination and treatment **with a chlamydia regimen** 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 **patient** 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 **patient**s present with symptoms. HIV and syphilis are more prevalent than LGV in Georgia and **patient**s should be screened for all STDs.

- 5. Advise the patient to return to clinic for all lab results even if presumptively treated at initial visit. Inform patient if lab results are positive additional treatment may be needed.
- 6. Education and counseling of the correct usage of protective barriers (condoms, dental dams, etc.).

- 7. Assist patient in developing a personalized STD/HIV risk reduction plan and document patients plan.
- 8. HIV antibody test to determine HIV status, if unknown.
- 9. Emphasize the importance of regular health screenings among highrisk populations.
- 10. Hepatitis A, Hepatitis B and or HPV vaccine, if **patient** is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <u>http://www.health.state.ga.us/programs/immunization/publications</u>. .asp.

#### MANAGEMENT OF SEX PARTNERS

Refer sex partners from within 60 days prior to the development of symptoms for examination and treatment with a chlamydia regimen and avoid sex until partner has been treated.

#### **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 (continued signs and symptoms of LGV in the absence of possible reinfection).
- 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 **patient** presents to the health department with history and signs/symptoms that are suggestive of LGV, may need to consult with your delegating physician. **STD Nurse Consultant should be notified of suspected or confirmed LGV case.**
- 4. Public Health Employees must be familiar with procedures for reporting possible sexual or physical abuse of children if encountered through history or physical. All suspected sexual or physical abuse of children 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*, which may be viewed on the Public Health Information Library (PHIL) at http://www.dphphil.org/policy.

- 5. Refer to a District Communicable Disease Specialist for prevention counseling and assistance with partner referral.
- 6. Consult delegating physician when further medical guidance is needed and standard protocol is not applicable for therapeutic treatment of patient.

- 1. Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12, December 17, 2010.
- 2. Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010.
- 3. CDC, "MMWR Weekly", Lymphogranuloma Venereum Among Men Who Have Sex with Men-Netherlands, Article, 53 (42) pp. 985-988 October 29, 2004.
- 4. CDC, "Sexually Transmitted Diseases" *Lymphogranuloma Venereum (LGV) Project*, n.d.,<<u>http://cdc.gov/std/lgv/default.htm</u>> (April 4, 2005).
- 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.* <a href="http://health.state.ga.us/publications/pressrelease/021705.asp">http://health.state.ga.us/publications/pressrelease/021705.asp</a> (April 28, 2011).
- 6. "Lexi-Comp Online," Lexi-Comp, Inc., <<u>http://online.lexi.com</u>> (March 4, 2013).

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#### 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.
  - 3. May be painful or pruritic.
- **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 titer, if not already done.
- 2. HIV antibody test to determine HIV status, if unknown.

- 3. Darkfield Exam of any open moist lesions to rule out primary syphilis or condylomata lata of secondary syphilis, if available.
- 4. A biopsy referral may be indicated it the wart(s) does not respond to therapy or gets worse during treatment.
- Recommendation: 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 **patients** will require a course of therapy rather than a single treatment. Treatment is not indicated in the absence of lesions.

#### PHARMACOLOGIC

1. **Patient**-Applied:

**NOTE**: For genital warts only. **Patient** 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 **patients**.

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 cm<sup>2</sup>, and no more than 0.5 mL of podofilox used per day. Nurse should apply the initial treatment to demonstrate to patient proper application technique.

#### 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. Educate patient about local inflammatory reaction.

 Provider-Administered
NOTE: This Trichloroacetic acid, bichloroacetic acid or Podophyllin should not be used in children, pregnant or nursing patients.

**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.
NOTE: Treatment outlined is not for individuals with lesions in the urethra, vagina, anal, or cervical areas.

#### 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.

# PATIENT 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, **patient should** wash 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. Most HPV infections can clear spontaneously. However, some infections do get worse.
- 5. Infected females should undergo regular cervical Pap screening as recommended for females without genital warts.
- 6. Partners may be infected with HPV even if they have no visible warts. The use of condoms may reduce transmission to new partners.
- 7. HPV infection may persist lifelong in a dormant state and become infectious intermittently.
- 8. Correct and consistent condoms use may lower transmission and contact of HPV, but may not provide full protection based upon location(s) of HPV not covered by condom.
- 9. For **patient**-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.
- 10. Assist patient to develop a personalized STD/HIV risk reduction plan and document patients plan.
- 11. Education and counseling of the correct usage of protective barriers (condoms, dental dams, etc.).
- 12. HIV antibody test to determine HIV status, if unknown.

13. Hepatitis A, Hepatitis B and or HPV vaccine, if patient is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <u>http://www.health.state.ga.us/programs/immunization/publications</u>. .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, **patients** 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 follow Georgia Breast and Cervical Cancer Program Cervical Screening Guidelines.
- 4. If **patient** is pregnant, consult with physician for referral.
- 5. Public Health Employees must be familiar with procedures for reporting of possible sexual abuse of children if encountered through history, physical. All suspected sexual abuse of children 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*, which may be viewed on the Public Health Information Library (PHIL) at <u>http://www.dphphil.org/policy.</u>

- 6. Consult with or refer to primary care provider if warts not responding to treatment.
- 7. Consult delegating physician when further medical guidance is needed and standard protocol is not applicable for therapeutic treatment of patient.

- 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., <<u>http://online.lexi.com</u>> (March 11, 2013).
#### 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). Type 1 antibodies may be present in someone with only genital lesions who may have acquired Herpes simplex through oral sex. 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

- 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,

#### OR

- 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.
- 7. In the setting of HIV positive patient, a large non-healing genital ulceration may be HSV.

#### **ASSESSMENT** Genital Herpes

#### PLAN DIAGNOSTIC STUDIES

- 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 **patient** does not have herpes **because the virus may not be always cultured from the lesion if not present in adequate amount**.
- 2. Type-specific HSV serologic assays might be useful in the following scenarios:

NOTE: Herpes culture should be preformed first when noticeable symptoms are present. Serology should be done in conjunction to herpes culture in the below scenarios.

- 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 **patient** with a history of multiple sex partners.
- **Patients** with HIV infection.
- MSM at increased risk for HIV acquisition.

## NOTE: Screening for HSV-1 and HSV-2 in the general population is not indicated.

3. **If available, d**arkfield exam of lesion fluid and/or Rapid Plasma Reagin (RPR) to rule out syphilis. Unless co-existing with syphilis, lesions will be darkfield negative.

#### 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**se** 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 an **OB/GYN** physician for treatment. Lactating **patients** 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,

#### ÓOR

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

**patient** should be provided with a supply of medication with instructions to self-initiate treatment immediately when symptoms begin **and to contact health department for follow-up assessment of current symptoms**.

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. 7.59).
  1) Acyclovir 400 mg PO, 2 times a day,
  - Acyclovir 400 mg PO, 2 times a day, **OR**
  - 2) Famciclovir 250 mg PO, 2 times a day, OR
  - Valacyclovir 500 mg PO, once a day, use only if 9 or fewer 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 **patients** who have more than 9 episodes per year.

#### d. HIV-infected **patients**

- 1) Episodic treatment:
  - a) Acyclovir 400 mg PO, 3 times a day, for 5-10 days,

OR

- 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. **Over-the-counter o**ral analgesic of **patient'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.

#### PATIENT EDUCATION/COUNSELING (Reinforce pertinent information with handouts)

Counseling of infected persons and their sex partners is critical to help the **patient** cope with the infection and to prevent sexual and perinatal transmission. Although initial counseling is important, many **patients** 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 **patients** 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 **patients** 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. Sexual transmission can occur during asymptomatic periods.
- 7. 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.
- 8. Prodrome occurs before recurring episodes. A day or two before an outbreak occurs; the genital skin gets sensations such as itching, tingling or pain. This period is called prodrome phase. The skin also sheds virus during this phase. Therefore, it is important to have no sexual relation during this period. If your partner has herpes, ask them to keep you informed about their prodrome phase.
- 9. Explain the risk for neonatal infection to all **patients**, 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.
- 10. **Patients** should refer all symptomatic sex partner(s) for evaluation. Asymptomatic sex partners may be referred for evaluation and counseling.
- 11. Discuss resources available for further information and psychological support including availability of latex condoms.
- 12. Risk of neonatal HSV should be discussed with females and males.
- 13. Refer all pregnant **patients** who are infected or exposed to herpes to obstetrician.
- 14. Episodic treatment does not reduce risk of transmission.

- 15. Recurrence of lesions does not mean that the **patient** has been reexposed.
- 16. Education and counseling of the correct usage of protective barriers (condoms, dental dams, etc.).
- 17. Assist client to develop a personalized STD/HIV risk reduction plan and document patient's plan.
- Hepatitis A, Hepatitis B and or HPV vaccine, if patient is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <u>http://www.health.state.ga.us/programs/immunization/publications</u>. .asp.
- 19. Women without symptoms or signs of genital herpes or prodrome can deliver vaginally. Women with recurrent genital herpetic lesions near or at the onset of delivery should deliver by C-section to prevent transmission to infant during vaginal delivery.
- 20. Advise the patient to return to clinic for all lab results even if presumptively treated at initial visit. Inform patient if lab results are positive additional treatment may be needed.
- 21. HIV antibody test to determine HIV status, if unknown.

#### MANAGEMENT OF SEX PARTNERS

- 1. Symptomatic sex partners should be managed the same as any **patient** 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 **patient** when culture results are available. Individualize counseling according to clinical progress and apparent emotional impact where further education

and counseling for **patient** and sex partners may be indicated. Assist **patient** to develop a personalized STD/HIV risk reduction plan.

- 2. If the **patient** did not have a positive herpes culture, order typespecific 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
- 3. For **patients** on continuous daily suppressive therapy, discuss therapy after one year, to assess the **patient's** psychological adjustment to genital herpes, rate of recurrent episodes, **and the need to continue or discontinue therapy**.

#### 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, **1-800-CDC-INFO**, or <u>http://www.ashastd.org/herpes/herpes\_overview.cfm</u>
- 3. Refer to physician the following types of **patients**:
  - a. Pregnant, OB physician must be given full information including copy of laboratory slips to ensure that the client is treated adequately.
  - b. With history of renal impairment
  - c. With persistent lesions
- 4. In HIV positive patients, if receiving antiviral treatment and lesions persist or recur refer to Infectious Disease specialist for evaluation of possible resistance.
- 5. Consult delegating physician when further medical guidance is needed and standard protocol is not applicable for therapeutic treatment of patient.
- 6. Public Health Employees must be familiar with procedures for reporting possible sexual or physical abuse of children if encountered through history or physical. All suspected sexual or physical abuse of children 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*, which may be viewed on the Public Health Information Library (PHIL) at <u>http://www.dphphil.org/policy</u>.

#### 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., <<u>http://online.lexi.com</u>> (March 11, 2013).

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#### 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 **patient** 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 **patient** 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 **patient** 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.
- 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. Painless ulcer (chancre) with an indurated border and relatively smooth base, at a site of sexual exposure, e.g., genitals, anus, mouth.
- 5. Localized firm, non-tender, enlarged lymph nodes.

#### THERAPEUTIC

#### PHARMACOLOGIC

- 1. If **patient** 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 lactating patient(s); patient(s) must be advised to discontinue breastfeeding or receive alternative regimen. Breastfeeding can be restarted 2 days after completion of treatment.

- 2. If **patient** is pregnant
  - a. Benzathine Penicillin G, 2.4 mu IM, once, after (see consultation/referral),

OR

- b. If **patient** is allergic to penicillin, await lab results and consult physician.
- 3. If **patient** is HIV-infected
  - a. Benzathine Penicillin G, 2.4 mu IM, once, **OR**
  - b. Doxycycline 100 mg PO, 2 times a day for 14 days.

NOTE: Do not give Doxycycline or Tetracycline to lactating patient (s); patient(s) must be advised to discontinue breastfeeding or receive alternative regimen and Breastfeeding can be restarted 2 days after completion of treatment.

#### PATIENT 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. This may occur within 12 hours after treatment of early syphilis. Local reaction may consist of intensification of lesions (e.g., a chancre may become edematous or a faint secondary rash may become prominent). Systemic reaction may consist of a rise in temperature of 101-102 degrees Fahrenheit. The self-limiting reaction usually only last a few hours, but may be up to 24 hours. Antipyretic may be taken as needed. Pregnant women may have more severe reactions and should contact their prenatal care provider at the first sign or symptoms.
- 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. Education and counseling of the correct usage of protective barriers (condoms, dental dams, etc.).
- 7. Assist **patient** to develop a personalized STD/HIV risk-reduction plan.
- 8. HIV antibody test to determine HIV status, if unknown.
- 9. Hepatitis A, Hepatitis B and or HPV vaccine, if **patient** is unvaccinated and meets eligibility criteria for state supplied

vaccines. To access most current version, go to <u>http://www.health.state.ga.us/programs/immunization/publications</u>.asp

#### MANAGEMENT OF SEX PARTNERS

- 1. Do thorough history and examination for signs of syphilis; draw blood for RPR.
- 2. Counsel **patient** 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 **patient** and partner(s) for District Communicable Disease Specialist use if diagnosis of syphilis **is made**.
- 2. Give the **patient** 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 **medical director or** physician if lesion does not improve in one week.
- 3. Consult with physician if **patient** is pregnant and allergic to penicillin for desensitization referral.
- 4. Refer all pregnant women to OB/GYN for prenatal care.
- 5. Consult delegating physician when further medical guidance is needed and standard protocol is not applicable for therapeutic treatment of patient.

6. Public Health Employees must be familiar with procedures for reporting possible sexual or physical abuse of children if encountered through history or physical. All suspected sexual or physical abuse of children 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*, which may be viewed on the Public Health Information Library (PHIL) at <u>http://www.dphphil.org/policy</u>.

#### 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)
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#### 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 **patient** 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: NOTE: Symptomatic neurosyphilis can rarely occur in the secondary stage and should be considered if signs and/or symptoms of meningitis are present.
  - 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 RPR or STAT POSTIVE RPR **card test** 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
  - 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, 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.

**NOTE:** Persons with secondary typical signs, a newlyreactive RPR or STAT POSITIVE RPR and no history of previous syphilis may be treated for secondary syphilis prior to the results of the treponemal test being available.

- 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 **patients**

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 HIVinfected **patients** with neurologic symptoms.

ASSESSMENT Primary Syphilis OR Secondary Syphilis

#### PLAN DIAGNOSTIC STUDIES

1. RPR titer, if not already done.

2. Repeat RPR, if lab results are equivocal or indeterminate in two to four weeks.

Interpretation of Syphilis EIA or FTA results Reactive = means a diagnosis of syphilis is confirmed Minimal reactive or equivocal= means the test could not be called either reactive or non-reactive and a second specimen should be submitted for repeat testing in two to four weeks. Non-reactive= means a diagnosis of syphilis is not confirmed.

- 3. Confirmatory test by a reactive treponemal EIA, FTA-ABS, or TPPA.
- 4. Recommendation: RPR STAT Card, if available. Must be able to titer out results if RPR STAT card report positive findings, confirmed by a reactive treponemal EIA, FTA-ABS, or TPPA. If RPR card test negative, titer out results to rule out prozone phenomenon (false negative test).
- 5. Recommendation: Darkfield microscopic exam if resources are available.

#### THERAPEUTIC

#### PHARMACOLOGIC

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

#### **RECOMMENDED REGIMEN**

- 1. If **patient** 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 or Tetracycline to lactating patient (s); patient(s) must be advised to discontinue breastfeeding or receive alternative regimen and Breastfeeding can be restarted 2 days after completion of treatment.

#### **ALTERNATIVE REGIMEN**

- a. Tetracycline 500mg PO, 4 times a day for 14 days.
- 2. If **patient** is pregnant or HIV-infected,
  - a. Benzathine Penicillin G, 2.4 million units IM, once. **OR**
  - b. If history of allergy to penicillin, the **patient** must be referred for skin testing and possible desensitization and subsequent treatment with penicillin.

Empiric treatment for primary or secondary syphilis can be given if clinical magnifications (i.e., chancre, skin rash, lymphadenopathy) of primary or secondary are identified and the patient is unlikely to be located for treatment when test results are available. If empiric treatment is provided patient education must include:

- a. Information of presumptive therapy with pending lab results.
- b. Patient option to consent to treatment or refusal of treatment prior to lab results due to the high suspicion of syphilis.
- c. Patient must return for lab results.
- d. Patients should be referred to a Communicable Disease Specialist (CDS) for further counseling.
- e. Updated demographics (current locating information, phone number, emergency contact, etc.) collected on patient and provided to CDS.

#### PATIENT 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, possible side effects, and what to do about them. **Patients** receiving oral treatment must report noncompliance due to any reason for corrective actions.
- 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.) Jarisch-Herxheimer Reaction may occur within 12 hours after treatment of early syphilis. Local reaction may consist of intensification of lesions (e.g., a chancre may become edematous or a faint

secondary rash may become prominent). Systemic reaction may consist of a rise in temperature of 101-102 degrees Fahrenheit. The self-limiting reaction usually only last a few hours, but may be up to 24 hours. Antipyretic may be taken as needed. Pregnant women may have more severe reactions and should contact their prenatal care provider at the first sign or symptoms.

- 4. Signs and symptoms of neurosyphilis (see attached Appointment Card 7.83). If neurologic or ophthalmic disease suspected patient should be referred for CSF analysis, otologic and ophthalmologic examination.
- 5. The need for, and schedule of, follow-up blood tests at **3**, **6**, **and 12 months**.
- 6. Counseling regarding abstinence until therapy is completed for the patient.
- 7. 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.
- 8. Assist **patient** to develop a personalized STD/HIV risk reduction plan. Discuss consequences of untreated disease.
- 9. Refer all pregnant **patients** to OB/GYN physician.
- 10. Education and counseling of the correct usage of protective barriers (condoms, dental dams, etc.).
- 11. If empiric treatment is provided patient education must include:
  - Information of presumptive therapy with pending lab results.
  - Patient option to consent to treatment or refusal of treatment prior to lab results due to the high suspicion of syphilis.
  - Patient must return for lab results.
  - Patients should be referred to a Communicable Disease Specialist (CDS) for further counseling.
  - Updated demographics (current locating information, phone number, emergency contact, etc.) collected on patient and provided to CDS.

12. Hepatitis A, Hepatitis B and or HPV vaccine, if **patient** is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <u>http://www.health.state.ga.us/programs/immunization/publications</u>. .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 **once** during the third trimester and at delivery. Monthly RPR titers may be indicated for women at high risk for reinfection.
- 4. **HIV positive patients should be managed in the same manner as HIV-negative patients with the exception of** monitoring 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 **patients** that previously had syphilis.
- 6. Seek medical consultation from delegating physician if a, b and/or c occurs:

- a. If signs or symptoms persist or recur, or if a sustained fourfold increase in titer compared to the baseline or maximum titer occurs, the **patient** probably failed treatment or was reinfected. The **patient** 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 **patient** should be reevaluated for HIV infection. If further clinical and serologic follow up cannot be assured, re-treatment should be given.
- 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. Consult delegating physician when further medical guidance is needed and standard protocol is not applicable for therapeutic treatment of patient.
- Probable or suspected cases of syphilis with clinical magnifications or reactive RPR titer should receive medical director consultation immediately while pending confirmatory for possible presumptive treatment.
- 3. If signs or symptoms of neurologic or ophthalmic disease.
- 4. For penicillin-allergy skin testing and desensitization, as necessary.
- 5. For CSF exam in instances noted previously.
- 6. All primary and secondary syphilis cases should be referred to a Communicable Disease Specialist for further counseling and sex partner referral.
- 7. Public Health Employees must be familiar with procedures for reporting possible sexual or physical abuse of children if encountered through history or physical. All suspected sexual or physical abuse of children 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*, which may be viewed on the Public Health Information Library (PHIL) at <u>http://www.dphphil.org/policy</u>

#### 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., <<u>http://online.lexi.com</u>> (March 11, 2013).

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#### 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 **patient** 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. RPR titer, if not already done.

Interpretation of Syphilis EIA or FTA results Reactive = means a diagnosis of syphilis is confirmed Minimal reactive or equivocal= means the test could not be called either reactive or non-reactive and a second specimen should be submitted for repeat testing in two to four weeks. Non-reactive= means a diagnosis of syphilis is not confirmed.

## 3. Confirmatory test by a reactive treponemal EIA, FTA-ABS, or TPPA.

4. Review Appointment Card Signs/Symptoms of Neurosyphilis with client, if any found, refer to **medical director**.

#### THERAPEUTIC

#### PHARMACOLOGIC

- 1. Early Latent Syphilis
  - a. If **patient** is not pregnant, allergic to penicillin, nor HIV-infected and neurosyphilis (see appointment card on page 7.83) is ruled out:
    - 1) Benzathine Penicillin G, 2.4 million units IM, once.

OR

 If allergic to penicillin, Doxycycline 100 mg PO, 2 times a day for 14 days, with careful monitoring for compliance.

NOTE: Do not give Doxycycline to HIV-positive patient(s), pregnant patient(s), or lactating patient(s); patient(s) must be advised to discontinue breastfeeding or receive alternative regimen. Breastfeeding can be restarted 2 days after completion of treatment.

b. If patient is pregnant and neurosyphilis (see appointment card on page 7.83) is ruled out treat with Benzathine Penicillin G, 2.4 million units IM, once.

> If patient is pregnant and allergic to penicillin refer to allergist for desensitization with subsequent treatment with penicillin.

c. If patient is HIV-positive and neurosyphilis (see appointment card on page 7.83) is ruled out treat with Benzathine Penicillin G, 2.4 million units IM, once.

> If patient is HIV-positive and allergic to penicillin refer to allergist for desensitization with subsequent treatment with penicillin.

NOTE: If patient 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 **patient** 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: Do not give Doxycycline to HIVpositive patient(s), pregnant patient(s), or lactating patient(s); patient(s) must be advised to discontinue breastfeeding or receive alternative regimen. Breastfeeding can be restarted 2 days after completion of treatment.

#### **ALTERNATIVE REGIMEN**

Tetracycline 500 mg PO, 4 times a day for 28 days

#### OR

If **patient** has a history of allergy to penicillin, refer for skin testing and possible desensitization, with subsequent treatment with benzathine penicillin.

NOTE: Do not give Doxycycline or Tetracycline to lactating patient (s); patient(s) must be advised to discontinue breastfeeding or receive alternative regimen. Breastfeeding can be restarted 2 days after

#### completion of treatment.

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

- b. If **patient** 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 **patients** who miss any dose of therapy, scheduled at 7-day intervals, must restart the sequence of injections.

- 2) If **patient** has a history of allergy to penicillin, refer for skin testing and possible desensitization, with subsequent treatment with **Benzathine Penicillin G, 2.4 mu IM,** weekly for 3 doses (7.2 mu total)..
- c. If patient is HIV-positive 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: Patient(s) who miss any dose of therapy, scheduled at 7-day intervals, must restart the sequence of injections. OR

2) If patient has a history of allergy to penicillin, refer for skin testing and possible desensitization, with subsequent treatment with Benzathine Penicillin G, 2.4 mu IM, weekly for 3 doses (7.2 mu total).

#### PATIENT 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.) Jarisch-Herxheimer Reaction may occur within 12 hours after treatment of early syphilis. Local reaction may consist of intensification of lesions (e.g., a chancre may become edematous or a faint secondary rash may become prominent). Systemic reaction may consist of a rise in temperature of 101-102 degrees Fahrenheit. The self-limiting reaction usually only last a few hours, but may be up to 24 hours. Antipyretic may be taken as needed. Pregnant women may have more severe reactions and should contact their prenatal care provider at the first sign or symptoms.
- 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 **patients** 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 **patient appointment card** containing signs and symptoms of neurosyphilis with instructions on when to return.
- 7. Seropositive pregnant women should be considered infected unless adequate documentation of treatment history in medical records and titers has declined.
- 8. Pregnant women diagnosed for syphilis in 2<sup>nd</sup> trimester, should be referred to OB/GYN for sonographic fetal evaluation for congenital syphilis.
- 9. Assist patient in developing a personalized STD/HIV risk reduction plan and document patients plan.
- 10. Education and counseling of the correct usage of protective barriers (condoms, dental dams, etc.).
- 11. Review Appointment Card Signs/Symptoms of Neurosyphilis with patient.
- 12. HIV antibody test to determine HIV status, if unknown.

- 13. Refer pregnant **patient** s to OBGYN physician for prenatal care.
- Hepatitis A, Hepatitis B and or HPV vaccine, if **patient** is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <u>http://www.health.state.ga.us/programs/immunization/publications</u>. .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 **patient** develops signs or symptoms attributable to syphilis, evaluate for possible neurosyphilis and re-treat appropriately.
- 2. If the **patient** 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 **patient** for CSF (cerebrospinal fluid) exam and re-treat accordingly.
- 3. If pregnant, clinical evaluation and RPRs should be done at least once during the third trimester and at delivery.

#### CONSULTATION/REFERRAL

- 1. Consult delegating physician when further medical guidance is needed and standard protocol is not applicable for therapeutic treatment of patient.
- 2. All **patient**s who have neuropsychiatric signs and/or symptoms to a physician.
- 3. All HIV-infected **patient** s in late latent syphilis and/or syphilis of unknown duration to a physician.
- 4. Pregnant women diagnosed for syphilis in 2<sup>nd</sup> trimester, should be referred to OB/GYN for sonographic fetal evaluation for congenital syphilis.
- 5. To a physician for skin testing for penicillin allergy, and possible desensitization, as necessary.
- 6. All latent syphilis cases should be referred to a Communicable Disease Specialist for further counseling and sex partner referral.
- 7. Public Health Employees must be familiar with procedures for reporting possible sexual or physical abuse of children if encountered through history or physical. All suspected sexual or physical abuse of children 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*, which may be viewed on the Public Health Information Library (PHIL) at http://www.dphphil.org/policy.
- 8. Refer pregnant **patient** s to OBGYN physician for prenatal care.

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

Patient Health Information: You have been treated for Syphilis. This infection is curable			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.		
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.					
To ensure the infection has been cured, it is important that					Memory Loss
you repeat blood work every:					Problems with Mental Function
6 months (after initial treatment)					Unsteady Walking
■ 12	12 months (for follow-up)				Balance Problems (Dizziness or Faint)
24 months (for further follow-up)				Urinary Problems (Can't Hold Pee)	
					Bowel Problems (Can't hold bowel movements)
Return to:					Vision Problems (Blurred vision, loss of vision)
PLACE HEALTH CLINIC LABEL HERE					Eye Pain
ABC Health Dept					Problems Having Sex
123 Health Way Treat Infection, State 12345					Numbness or Loss of Feeling in Legs
					Stiff Neck
On the following Dates:					Headache
Date		Treatment			Fever
					Loss of Hearing
					Persistent Nausea and Vomiting (Always throwing
			_	up)	
					Seizures
If you are having complications, have been re-exposed to					Stroke
this infection or feel you are having signs and symptoms, please return as soon as possible.					Unexplained Episodes of Severe Pain



#### 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., <<u>http://online.lexi.com</u>> (March 11, 2013).

#### 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. Keep a high index of suspicion of sexual molestation in children with pubic lice.
- **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. 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.

#### THERAPEUTIC

#### PHARMACOLOGIC

**NOTE:** Prior to treatment of children, consult with or refer to primary care provider. **Keep a high index of suspicion of sexual molestation in children with pubic lice.** 

- 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, **may repeat in one week if needed;**

**NOTE:** Patients 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.

- 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 patients. Patients 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.
- 1. Alternative Regimens (Consult physician prior to administering or dispensing to **patient**)
  - a. If age is equal or greater than two years of age, weigh at least 15 kg, and patient is not pregnant give lvermectin
     250 mcg/kg orally, repeat in two weeks.

**NOTE: Patients** 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. May reapply in 7-9 days if needed.

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

**NOTE: Patients** 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.

#### PATIENTS 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.
- 4. Education and counseling of the correct usage of protective barriers (condoms, dental dams, etc.).
- 5. Assist patient in developing a personalized STD/HIV risk reduction plan and document patients plan.
- 6. HIV antibody test to determine HIV status, if unknown.
- 7. Hepatitis A, Hepatitis B and or HPV vaccine, if patient is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <u>http://www.health.state.ga.us/programs/immunization/publications</u>. .asp.

#### 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. Pediculosis Pubis of the eyelashes/eyebrows should be referred to physician for proper treatment.
- 3. Consult with delegating Physician for treatment of patients related to pediculosis pubis outbreak (nursing homes, jails, schools, and other communities).

- 4. Consult delegating physician when further medical guidance is needed and/or standard protocol is not applicable for therapeutic treatment of patient.
- 5. Public Health Employees must be familiar with procedures for reporting possible sexual or physical abuse of children if encountered through history or physical. All suspected sexual or physical abuse of children 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*, which may be viewed on the Public Health Information Library (PHIL) at <u>http://www.dphphil.org/policy</u>.

#### REFERENCES

- 1. Centers for Disease Control and Prevention, *Sexually Transmitted Diseases Treatment Guidelines 2010*, Vol. 59, No. RR-12 December 17, 2010.
- 2. Erratum: *MMWR*, Vol. 59, RR-12, December 17, 2010.
- **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.
- 4. "Lexi-Comp Online," Lexi-Comp, Inc., <<u>http://online.lexi.com</u>> (March 11, 2013).

#### STANDARD NURSE PROTOCOL FOR SCABIES RELATED TO SEXUALLY TRANSMISSION (Refer to Child Health Scabies Protocol when infection can be ruled out acquired through sexual transmission.)

**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

- 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

NOTE: If the client is symptomatic for scabies and denies sexual (vaginal, penile, oral or anal) intercourses in the past 60 days: Scabies can be treated as per protocols without STI screening (CT, GC, RPR, HIV). Documentation of assessment must be completed. Client should be educated regarding the missed opportunity of screening for other STIs and possibility of asymptomatic infections.

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

#### THERAPEUTIC

#### PHARMACOLOGIC

#### **RECOMMENDED REGIMEN**

- 1. Nonpregnant, nonlactating **patient** 
  - 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
    - 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: Patients** who are breastfeeding will need to discontinue until 72 hours after last treatment.

#### ALTERNATIVE REGIMEN

- a. 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 **patients** must be provided a medication guide. Do not use Lindane:
  - Immediately after bath or shower,
  - If **patient** 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 **patient** has uncontrolled seizures.
- 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

- 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.

#### PATIENT EDUCATION/COUNSELING

(Reinforce pertinent information with handouts.)

1. The name of the condition and its significance.

- 2. Directions for use of medication.
- 3. Itching may persist for **up to two** weeks even after successful treatment. Over the counter, Hydrocortisone cream **(only use after diagnosis has been made)** or Benadryl cream may relieve persistent itching.
- 4. Education and counseling of the correct usage of protective barriers (condoms, dental dams, etc.).
- 5. Assist patient in developing a personalized STD/HIV risk reduction plan and document patients plan.
- 6. HIV antibody test to determine HIV status, if unknown.
- 7. Hepatitis A, Hepatitis B and or HPV vaccine, if patient is unvaccinated and meets eligibility criteria for state supplied vaccines. To access most current version, go to <u>http://www.health.state.ga.us/programs/immunization/publica</u> <u>tions.asp</u>.

#### MANAGEMENT OF PARTNERS

Those that have had close personal, household contacts, or sexual partners within the preceding month need examination and treatment.

#### **FOLLOW-UP**

Reexamine in 1 week. Retreatment can be considered after 1–2 weeks for **patients** 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. If alternative regimen is contraindicated refer patient to physician or dermatologist.

#### CONSULTATION/REFERRAL

- 1. Refer to Child Health Scabies Protocol when infection can be ruled out acquired through sexual transmission.
- 2. Repeated failure to respond to treatment.
- 3. Severe secondary infection.
- 4. 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.

- 5. Consult with delegating physician for treatment of patients related to scabies outbreak (nursing homes, jails, schools, and other communities).
- 6. Public Health Employees must be familiar with procedures for reporting possible sexual or physical abuse of children if encountered through history or physical. All suspected sexual or physical abuse of children 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*. which may be viewed on the Public Health Information Library (PHIL) at <u>http://www.dphphil.org/policy</u>.
- 7. Consult delegating physician when further medical guidance is needed and standard protocol is not applicable for therapeutic treatment of patient.

#### 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., <<u>http://online.lexi.com</u>> (March 11, 2013).

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