Evaluating Patients For Primary Syphilis

**SEXUAL HISTORY, RISK ASSESSMENT, & PHYSICAL EXAM**

**Sexual History, Risk Assessment (past year)**
- Gender of partners, number of partners (new, anonymous, serodiscordant) HIV status, exchange of sex for drugs or money
- Types of sexual exposure
- Recent STDS; HIV serostatus
- Substance abuse
- Condom use

**History of Syphilis**
- Prior syphilis (last serologic test & last treatment)
- Treponemal tests may be more sensitive than non-treponemal tests during primary syphilis.

**DIAGNOSTIC ISSUES IN PRIMARY SYPHILIS**
- Darkfield – Fast sensitive, varies with skill of examiner; decreased sensitivity as lesion ages
- A negative RPR/VDRL does not exclude syphilis diagnosis; ~75-85% sensitive in primary syphilis
- Use same test (RPR or VDRL) in sequential testing; titers are not interchangeable
- Need both non-treponemal (RPR or VDRL) and treponemal test (TP-PA, FTA-ABS, EIA, CIA) to make syphilis diagnosis
- Treponemal tests can remain positive for life; utility limited in patients with history of prior syphilis; comparison of non-treponemal titers needed

For more details on Treponemal Immunoassays:
www.cdc.gov/std/treatment

Efficacy not well established & not studied in HIV+ patients; close follow-up

**Alternative Regimens for Penicillin Allergic Non-Pregnant Patients:**
- **Recommended Regimen**
  - Tetracycline 500 mg po qid x 2 weeks
  - Benzathine Penicillin G 2.4 million units IM x 1
- **Additional Testing and Follow-up**
  - Titer at time of treatment may indicate treatment failure. Titer decline after treatment.
  - Reassess patient. If alternate diagnosis favored or treatment non-reactive, repeat RPR 2-4 weeks after treatment.

**TREATMENT & FOLLOW-UP**

**Treatment of Primary Syphilis**

**Recommended Regimen**
- Benzathine Penicillin G 2.4 million units IM x 1

**Alternative Regimens for Penicillin Allergic Non-Pregnant Patients:**

**Efficiency not well established & not studied in HIV+ patients; close follow-up essential:**
- Doxycycline 100 mg po bid x 2 weeks or
- Tetracycline 500 mg po qd x 2 weeks
- *Pregnant patients with penicillin allergy should be desensitized and treated with penicillin*

See CDC STD Treatment Guidelines: www.cdc.gov/std/treatment

**California STD Treatment Guidelines Grid:**
www.cdph.ca.gov/Programs/CID/DCD/PHP180/Documents/eF_Syphilis.pdf

**Evaluating for neurosyphilis (assess if neurologic, ophthalmic or otic symptoms present, as neurosyphilis can occur at any stage of syphilis)**

**Clinical Presentations of Primary Syphilis**

**Syphilitic Ulcer, Shaft**

**Multiple Syphilitic Ulcers, Shaft**

**Syphilitic Ulcer, Vulva**

**Grated Syphilitic Ulcer, Urethra**

**Syphilitic Ulcer, Perianal**

**Presumptive Primary Syphilis**

**Treat, obtain quantitative RPR and treponemal tests on treatment date, report to health department, partner management, & follow-up.

**If RPR non-reactive, repeat RPR 1-2 weeks after treatment.**

**Reassess patient. If alternate diagnosis favored or treatment non-reactive, repeat RPR 2-4 weeks after treatment.**

**Repeat EIA/CIA test 2-4 weeks after initial visit. Consider other etiologies.**

**Presumptive Primary Syphilis with RPR ≥5**

**Treat, obtain quantitative RPR on treatment date, report to health department, partner management, & follow-up. Repeat RPR 2-4 weeks after treatment.**

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**To Order Additional Copies**
See the online version of the Primary Syphilis Algorithm on the clinical resources page of the CA PTC website: www.californiaptc.org

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**REPORTING & PARTNER MANAGEMENT**

**All syphilis cases and presumptive cases must be reported to the local health department within one working day of diagnosis.**

**Local health departments will assist in partner notification & management**

**Contact Number at Local Health Department:** 505-657-3611
Evaluating Patients For Secondary Syphilis

**SEXUAL HISTORY, RISK ASSESSMENT & PHYSICAL EXAM**

- **History of Syphilis**
  - Past year
  - Past 3 years
  - Past 5 years
  - Past 10 years
  - Past 20 years
  - Past 50 years
  - Past 100 years

- **Number of partners**
  - New, anonymous, casual
  - Regular partner
  - Previous partner

- **Substance use**
  - Alcohol
  - Drugs

- **Condom use**
  - Always
  - Sometimes
  - Never

- **Types of sexual exposure**
  - STIs
  - HPV
  - Genital herpes
  - Human papillomavirus

- **Other relevant information**
  - HIV
  - Hepatitis B

**DIAGNOSTIC ISSUES IN SECONDARY SYPHILIS**

- **RPR/VDRL - 100% sensitive in secondary syphilis**
- **TREATMENT & FOLLOW-UP**
  - **Treat**, obtain quantitative RPR and treponemal tests on treatment date, report to health department, partner management, & follow-up.

**SECONDARY SYMPHILIS**

- **Rash:** Most common feature (75-90%) can be macular, papular, squamous (-scale), pustular (rare), vesicular (very rare) or combination; usually non-pruritic; may involve palms & soles (60%)
- **Neurosyphilis:** (2-5%); visual loss, hearing loss, cranial nerve palsies among other symptoms
- **Lymphadenopathy:** (70-90%); inguinal, epitrochlear, axillary & cervical sites most commonly affected

**REPORTING & PARTNER MANAGEMENT**

- All cases must be reported to the local health department within 1 working day of diagnosis
- Local health departments will assist in notification of partners & management

**PHYSICAL EXAM**

- Oral cavity
- Skin
- Palms & soles
- Nails
- Genitalia
- Urethra
- Rectum
- Lymph nodes

**SPECIAL CONSIDERATIONS**

- **HIV:** Consider presumptive treatment if high clinical suspicion.
- **Pregnant patients:** Consider presumptive treatment at the time of initial visit before diagnostic tests results are available; if at risk for syphilis, consider presumptive treatment at the time of initial visit before the diagnostic tests results are available. Presumptive treatment is also recommended if patient is HIV positive.
- **Hepatitis B:** Consider presumptive treatment if high clinical suspicion.
- **Drug Reaction:** Consider retreatment if titer fails to decline appropriately.
- **Prozone:** Occurs if excess antibody interferes with antibody/antigen reaction.

**CLINICAL PRESENTATIONS OF SECONDARY SYPHILIS**

- **Rashes**:
  - Most common feature (75-90%)
  - Can be macular, papular, squamous (scale), pustular (rare), vesicular (very rare)
  - Combination: usually non-pruritic
  - May involve palms & soles (60%)

- **Lymphadenopathy**:
  - (70-90%)
  - Sites: inguinal, epitrochlear, axillary & cervical

- **Neurosyphilis**:
  - (2-5%)
  - Symptoms: visual loss, hearing loss, cranial nerve palsies

- **Drug Reaction**:
  - Consider retreatment if titer fails to decline appropriately.

**DIAGNOSTIC WORK-UP**

- **RPR/VDRL**
  - Reactive: presumptive syphilis
  - Non-reactive: consider other etiologies.

- **TP-PA/FTA-ABS/EIA/CIA**
  - Reactive: confirmative syphilis
  - Non-reactive: consider other etiologies.

- **Quantitative RPR/VDRL**
  - Reactive: confirmative syphilis
  - Non-reactive: consider other etiologies.

- **EIA/CIA**
  - Reactive: confirmative syphilis
  - Non-reactive: consider other etiologies.

**TREATMENT & FOLLOW-UP**

- **Benzathine Penicillin G 2.4 million units IM x 1**
- **Local health departments will assist in partner notification & management**
- **Contact Number at Local Health Department:**
  - 505-476-3611

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- [Capel](https://www.domcalifornia.com)
- [San Francisco City Clinic Centers](https://www.sanfrancisco.gov)
- [University of Washington STD Prevention Training Center](https://www.uwmedicine.org)

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- [CAPTC](http://www.captc.org)
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**Additional Resources**

- [Secondary Syphilis Algorithm](http://www.uwmedicine.org)
- [Secondary Syphilis Treatment Guidelines](http://www.cdc.gov/std/treatment)

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