**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)

**Physical Exam**
- oral cavity
- lymph nodes
- skin
- palms & soles
- neurologic
- genitalia/pelvic
- perianal

---

**DIAGNOSTIC ISSUES IN SECONDARY SYPHILIS**

**RPR/VDRL**
- ~100% sensitive in secondary syphilis
- Tests must be quantified to the highest titer & titer on the day of treatment must be used to assess treatment response
- Always use the same testing method (RPR or VDRL) in sequential testing; cannot compare titer from the two tests
- Tests lack specificity (biologic false positive); all reactive tests need to be confirmed by a treponemal test for syphilis diagnosis
- Prozone Reaction: false negative RPR or VDRL from excess antibody blocking the antigen-antibody reaction
  - ~1% of secondary syphilis cases
  - Request lab to dilute the serum to at least 1/16 to rule out

---

**TREATMENT & FOLLOW-UP**

**Treatment of Secondary Syphilis**
Recommended Regimen
- Benzathine Penicillin G 2.4 million units IM x 1

Alternative Regimens for Penicillin Allergic Non-Pregnant Patients:
efficacy not well established & not studied in HIV+; close follow-up essential:
- Doxycycline 100 mg po bid x 2 weeks or
- Tetracycline 500 mg po qid x 2 weeks or
- Ceftriaxone 1gm IM or IV qd x 10-14 d

See CDC 2010 STD Treatment Guidelines:
www.cdc.gov/std/treatment/2010/default.htm
& California STD Treatment Guidelines Grid:
www.stdhivtraining.org/resource.php?id=15&ret=clinical_resources

**Follow-Up To Assess Treatment Response**
- 1-2 weeks & 1 month: clinical follow-up
- 3, 6, 9, 12, 24 months: serologic follow-up for HIVinfected
- 6, 12 months: serologic follow-up for HIV negative
- Treatment failure: failure of titer to decline fourfold within 6-12 months from titer at time of treatment

---

**REPORTING & PARTNER MANAGEMENT**

- All syphilis cases or suspected 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
Patient with new onset rash, atypical warty lesion or other signs & symptoms of secondary syphilis

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

**DIAGNOSTIC WORK-UP**
- RPR or VDRL serology
- TP-PA or FTA-ABS to confirm reactive RPR or VDRL

---

Reactive

RPR/VDRL

- Negative
  - Not Syphilis if Prozone Reaction is ruled out

- Reactive
  - TP-PA/FTA-ABS
    - Negative
      - Biologic False Positive: Not Syphilis
    - Reactive
      - Secondary Syphilis:
        - Treat, Follow-up, Report & Partner Management

---

*1. All patients with suspected syphilis should be tested for HIV infection & screened for other STDs. Repeat HIV testing of patients with secondary syphilis 3 months after the first HIV test, if the first test is negative

---

To Order Additional Copies
see the online version of the Secondary Syphilis Algorithm on the clinical resources page of the CA STD/HIV PTC website: http://www.stdhivtraining.org

---

Acknowledgements
The California STD/HIV Prevention Training Center thanks the Medical Directors from the National Network of Prevention Training Centers, The California STD Controllers Association and the Division of STD Prevention of the Centers for Disease Control and Prevention for their assistance in preparing this document. Revised 4/2011
Clinical Presentations Of Secondary Syphilis

- Symptoms typically occur 3-6 weeks after primary stage (can overlap with primary); resolve in 2-10 weeks
- 25% may have relapses of signs & symptoms in first year

Signs & Symptoms of Secondary Syphilis

- **Rash**: most common feature (75-90%); can be macular, papular, squamous (scale), pustular (rare), vesicular (very rare) or combination; usually nonpruritic; may involve palms & soles (60%)
- **Generalized Lymphadenopathy**: (70-90%); inguinal, axillary & cervical sites most commonly affected
- **Constitutional Symptoms**: (50-80%); malaise, fever
- **Mucous patches**: (5-30%); flat gray-white patches in oral cavity & genital area
- **Condyloma lata**: (5-25%); moist, heaped, wart-like lesions in genital, peri-rectal & rectal areas, & oral cavity
- **Alopecia**: (10-15%); patchy hair loss, loss of lateral eyebrows
- **Neurosyphilis**: (<2%); visual loss, hearing loss, cranial nerve palsies

### Differential Diagnosis

of the rash of secondary syphilis includes: pityriasis rosea, psoriasis, erythema multiforme, tinea versicolor, scabies, drug reaction (e.g. from HAART medications), primary HIV infection

---

**Photo Credits**

W With permission from Seattle STD/HIV Prevention Training Center at the University of Washington (photos from UW HSCER Slide Bank)
S With permission from San Francisco City Clinic
C Centers for Disease Control and Prevention