### 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 infected; 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 8-10 d or
- Azithromycin 2 gm po in a single dose

Also see CDC 2002 STD Treatment Guidelines:

**Follow-Up To Assess Treatment Response**
- 1-2 weeks & 1 month: clinical follow-up
- 3, 6, 9, 12, 24 months: serologic follow-up for HIV infected
- 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
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.
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

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