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

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

History of syphilis
prior syphilis (last serologic test & last treatment)

†DIAGNOSTIC ISSUES IN PRIMARY SYPHILIS

Darkfield
~ 80% sensitive, varies with experience/skill of examiner & decreased sensitivity as lesion ages

RPR/VDRL
- A negative RPR/VDRL does not exclude the diagnosis of syphilis; only ~75-85% sensitive in primary 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

TREATMENT & FOLLOW-UP

‡Treatment of Primary Syphilis
Recommended Regimen
- Benzathine Penicillin G 2.4 million units IM x 1

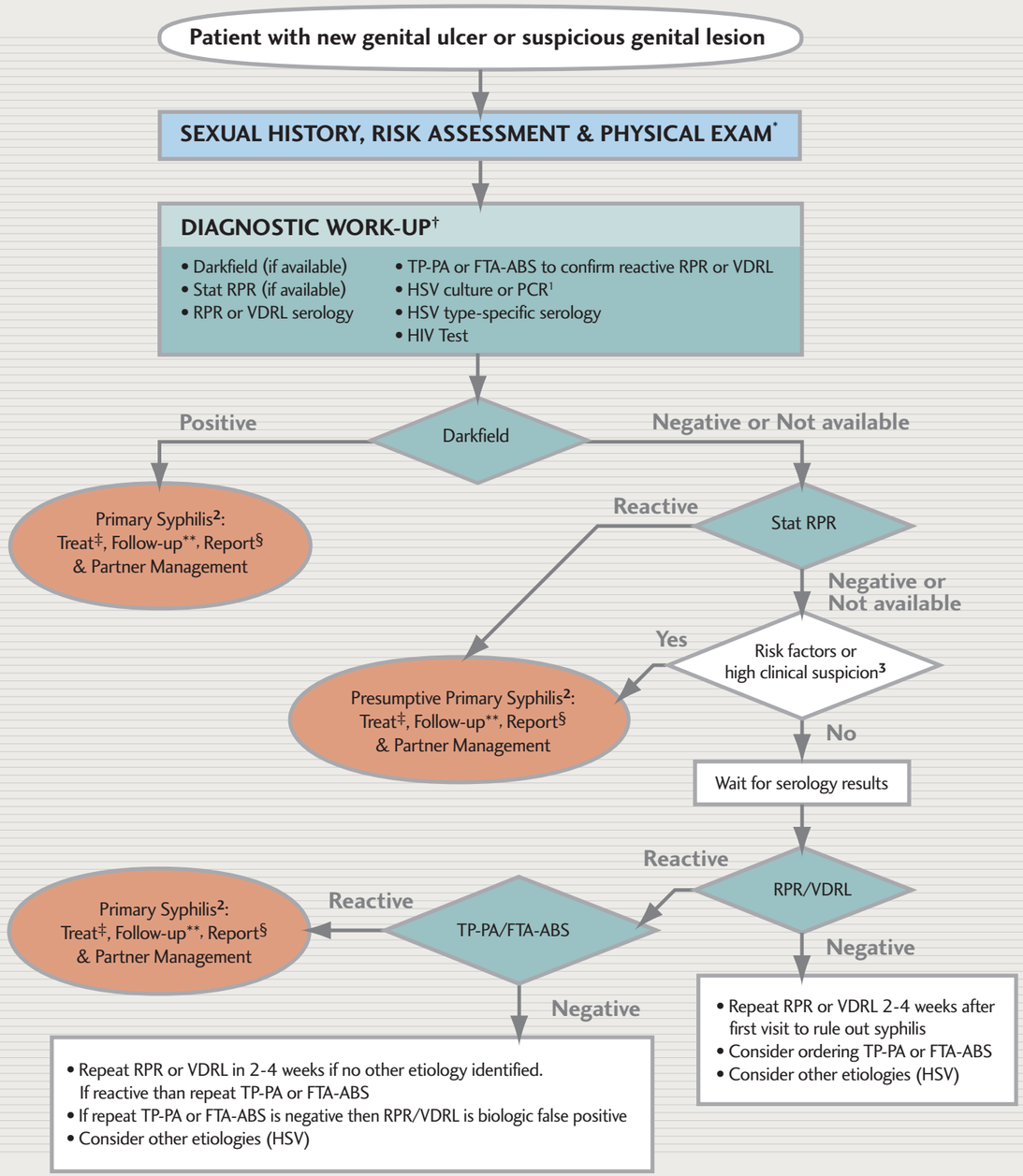
Alternative Regimens for Penicillin Allergic Non-Pregnant Patients:
efficacy not well established & not studied in HIV+; close follow-up essential:
- Doxycycline 100 mg po bid x 2 weeks or
- Tetracycline 500 mg po qid x 2 weeks or
- Ceftriaxone 1gm IM or IV qd x 10-14 d

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

****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 (405) 271-4636



***, †, ‡, §, ** see color coded boxes**

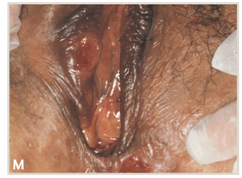
1. Also consider culture for Haemophilus ducreyi if exposure in endemic areas or if lesion does not respond to syphilis treatment.
2. All patients with suspected syphilis should be tested for HIV infection & screened for other STDs. Repeat HIV testing of patients with primary syphilis 3 months after the first HIV test, if the first test is negative.
3. If the patient is MSM (men who have sex with men) or has high risk sexual behavior (multiple partners, exchange of sex for money or drugs) or clinical exam with classic features of a syphilitic ulcer then presumptive treatment is recommended. Also consider presumptive treatment if patient follow-up is a concern.

Clinical Presentations Of Primary Syphilis

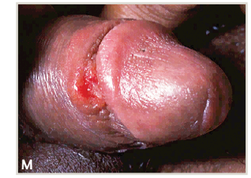
- Lesion appears 10-90 days after contact at site of exposure; may persist for 2-3weeks then resolves
- Usually genitorectal but may be extragenital, depends on exposure site
- Clinical presentation typical or atypical
  - Typical: single painless, indurated, clean-based ulcer with rolled edges & bilateral painless adenopathy
  - Atypical: can mimic herpes & other genital ulcers
  - ~25% present with multiple lesions

Differential Diagnosis

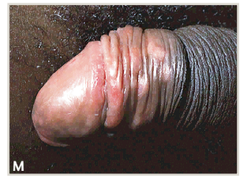
Herpes, chancroid, primary HIV ulcers, trauma & many non-STD causes of genital ulcers



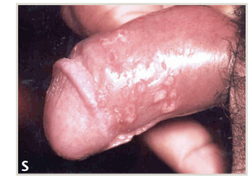
Multiple syphilitic ulcers, vulva



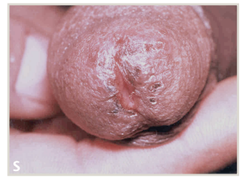
Syphilitic ulcer, corona



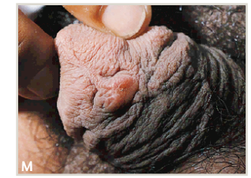
Multiple syphilitic ulcers, glans



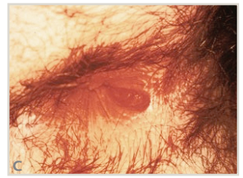
Multiple syphilitic ulcers resembling herpes



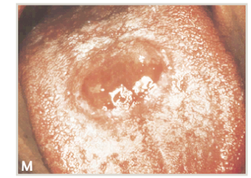
Crusted syphilitic ulcer, urethra



Healing syphilitic ulcer



Syphilitic ulcer, perianal



Syphilitic ulcer, tongue

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This form was adapted from the California STD HIV Prevention Training Center.

Acknowledgements

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Evaluating Patients For Secondary Syphilis

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- types of sexual exposure
- recent STDs; HIV serostatus
- substance abuse
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Physical Exam
- oral cavity
- lymph nodes
- skin
- palms & soles
- neurologic
- genitalia/pelvic
- perianal

History of syphilis
prior syphilis (last serologic test & last treatment)

†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

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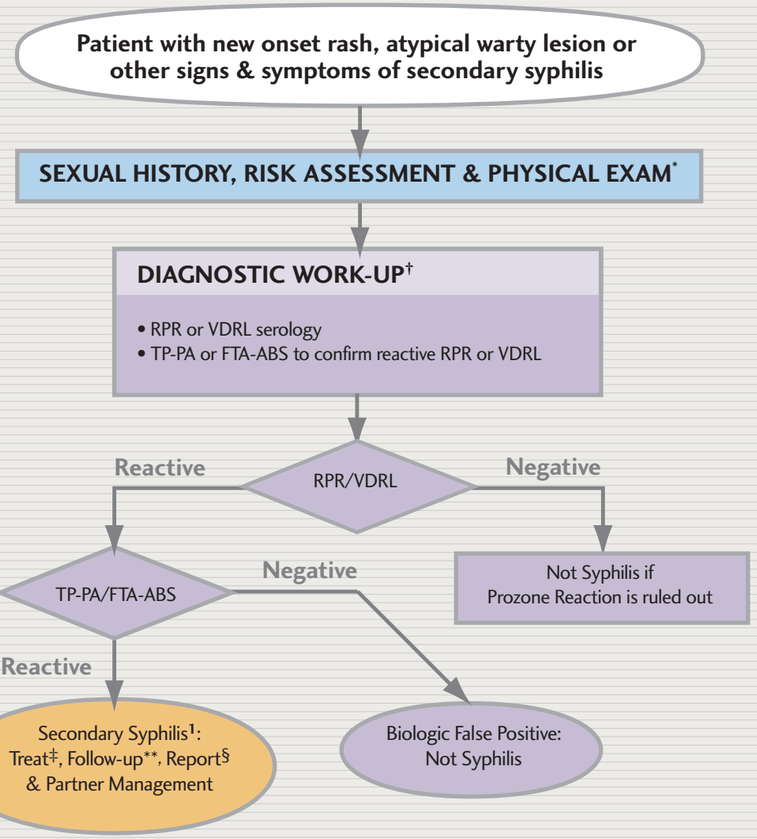

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1. All patients with suspected syphilis should be tested for HIV infection & screened for other STDs. Repeat HIV testing of patients with secondary syphilis 3 months after the first HIV test, if the first test is negative

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Creating a State of Health

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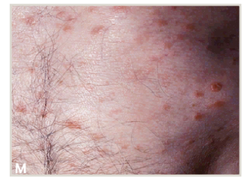
Clinical Presentations Of Secondary Syphilis

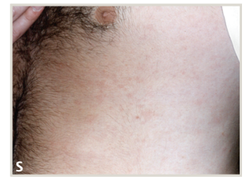
- Symptoms typically occur 3-6 weeks after primary stage (can overlap with primary); resolve in 2-10 weeks
- 25% may have relapses of signs & symptoms in first year

Signs & Symptoms of Secondary Syphilis

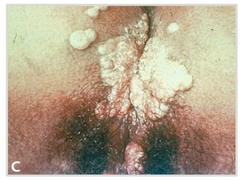
- **Rash:** most common feature (75-90%); can be macular, papular, squamous (scale), pustular (rare), vesicular (very rare) or combination; usually nonpruritic; may involve palms & soles (60%)
- **Generalized Lymphadenopathy:** (70-90%); inguinal, axillary & cervical sites most commonly affected
- **Constitutional 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



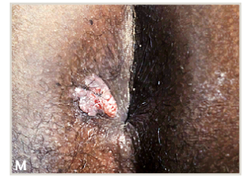
Macular & Papulosquamous Rash



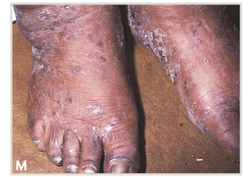
Subtle Macular Rash



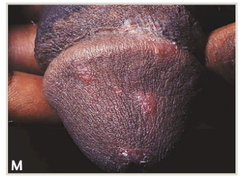
Condyloma lata



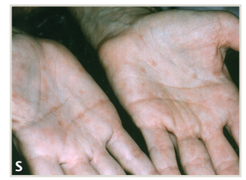
Condyloma lata



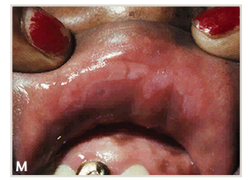
Papulosquamous Rash



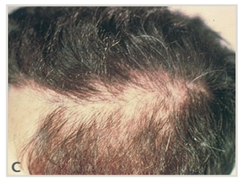
Papulosquamous Rash



Macular Rash

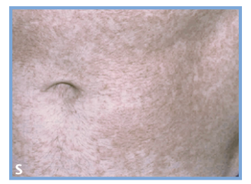


Mucous Patches

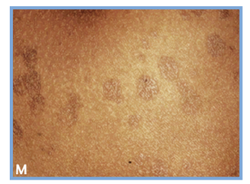


Alopecia

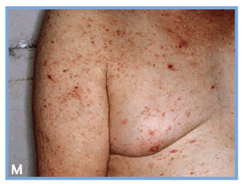
Differential Diagnosis of the rash of secondary syphilis includes: pityriasis rosea, psoriasis, erythema multiforme, tinea versicolor, scabies, drug reaction (e.g. from HAART medications), primary HIV infection



Drug Reaction



Tinea Versicolor



Generalized Scabies

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