

# 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

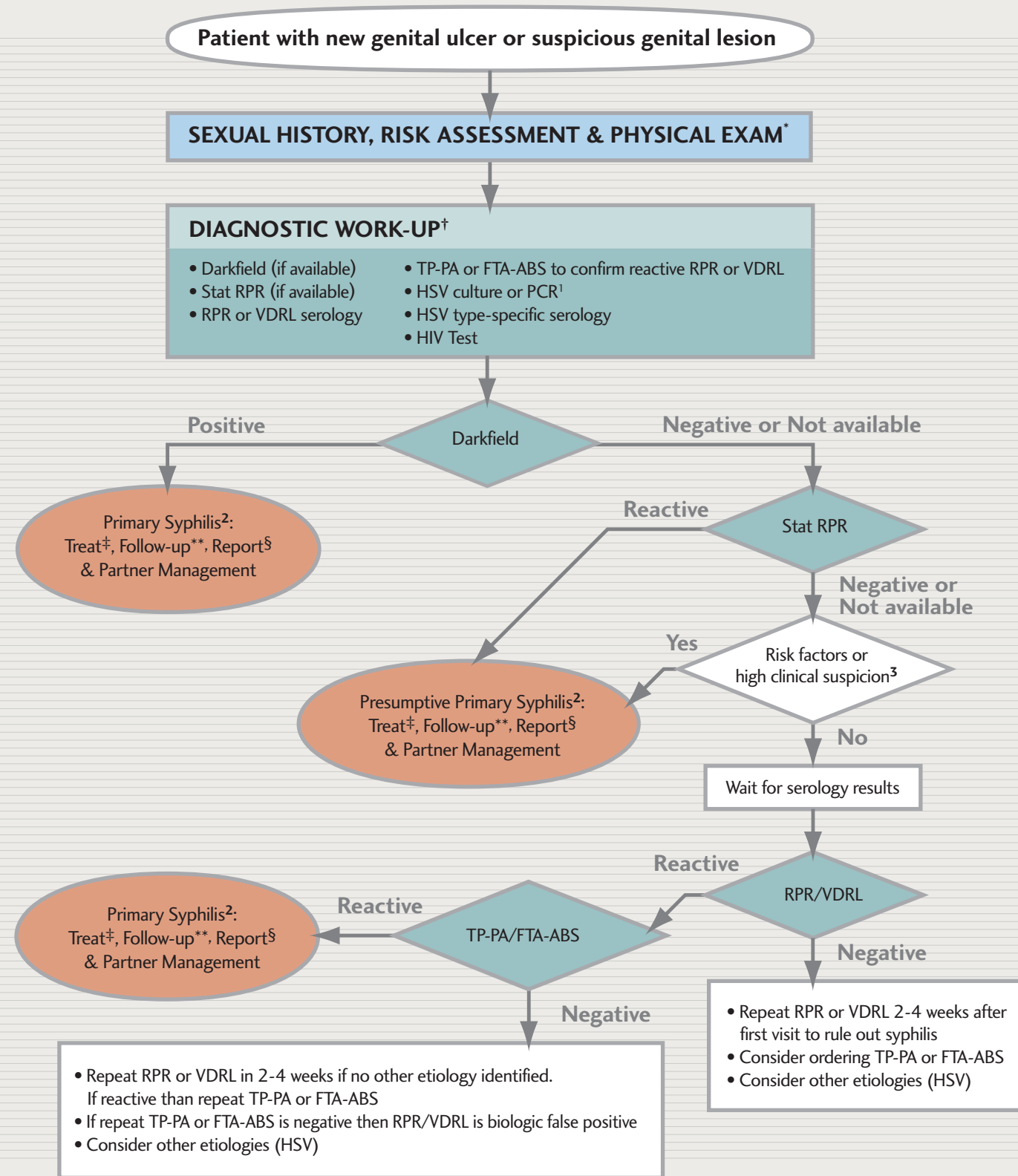
See CDC 2010 STD Treatment Guidelines: [www.cdc.gov/std/treatment/2010/default.htm](http://www.cdc.gov/std/treatment/2010/default.htm) & California STD Treatment Guidelines Grid: [www.stdhivtraining.org/resource.php?id=15](http://www.stdhivtraining.org/resource.php?id=15)

### \*\*Follow-Up To Assess Treatment Response

- 1-2 weeks & 1 month: clinical follow-up
- 3, 6, 9, 12, 24 months: serologic follow-up for 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



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

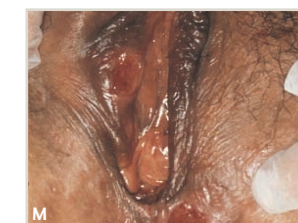
1. Also consider culture for Haemophilus ducreyi if exposure in endemic areas or if lesion does not respond to syphilis treatment.
2. All patients with suspected syphilis should be tested for HIV infection & screened for other STDs. Repeat HIV testing of patients with primary syphilis 3 months after 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 2-3 weeks 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

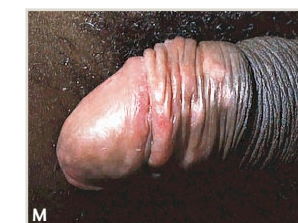
Herpes, chancroid, primary HIV ulcers, trauma & many non-STD causes of genital ulcers



Multiple syphilitic ulcers, vulva



Syphilitic ulcer, corona



Multiple syphilitic ulcers, glans



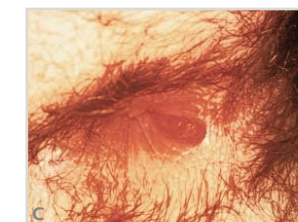
Multiple syphilitic ulcers resembling herpes



Crusted syphilitic ulcer, urethra



Healing syphilitic ulcer



Syphilitic ulcer, perianal



Syphilitic ulcer, tongue

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For additional copies,

see the online version of the Primary Syphilis Algorithm on the clinical resources page of the CA STD/HIV PTC website: <http://www.stdhivtraining.org>

### Acknowledgements

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