Syphilis: A growing concern

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Syphilis: A growing concern

General Purpose: To provide information about the stages of a syphilis infection with evidence-based diagnosis and treatment guidelines. Learning Objectives/Outcomes: After completing this continuing-education activity, you should be able to: 1. Describe epidemiology, causation, and stages of syphilis. 2. Outline the testing, treatment, and follow-up guidelines for syphilis.

1. Syphilis is a systemic disease caused by the bacterium
   a. T. pallidum.
   b. Borrelia burgdorferi.
   c. Streptomyces.

2. Which statement about the epidemiology of syphilis is accurate?
   a. 101,567 new diagnoses of tertiary syphilis were reported in 2018.
   b. 50% of the congenital cases are focused in three states.
   c. Rates among women decreased by 25% from 2012 to 2016.

3. Chancres are
   a. painful syphilitic sores.
   b. first noted 3 to 7 days after contact.
   c. usually located on the external genitalia.

4. Three independent factors that affect the manifestations of syphilis include the lesion locations, the infected patient’s immune status, and
   a. mechanism of transmission.
   b. time or duration of infection.
   c. sexual orientation.

5. The early stage of syphilis
   a. is defined as syphilis that has lasted between 1 and 2 years.
   b. includes incubation period and primary, secondary, and early latent stages.
   c. ends at the onset of the secondary stage.

6. During the primary stage, syphilis can present as a
   a. painless lesion, 3 to 4 days after exposure.
   b. nodule, then pustule, and lastly as a chancre.
   c. chancre with a size of 0.5 to 1.0 cm.

7. All of the following are associated with secondary stage syphilis except
   a. sensory deficits.
   b. a nonpruritic rash.
   c. neck stiffness.

8. The late latent stage of syphilis
   a. is not considered contagious.
   b. responds well to short-term antibiotics.
   c. does not transmit congenital syphilis to the fetus.

9. Which is one of the most common presentations during the tertiary stage of syphilis?
   a. hand and foot rash
   b. regional lymphadenopathy
   c. ocular symptoms

10. Gummatus syphilis refers to the
    a. presence of oral chancre lesions.
    b. formation of benign tumorous skin lesions.
    c. rare involvement of the skin in late latent syphilis.

11. Congenital syphilis from the transmission of T. pallidum
    a. happens in utero via placenta vasculature.
    b. occurs during passage through the birth canal.
    c. occurs only during the tertiary stage of the disease in the mother.

12. Untreated infected newborns with congenital syphilis are considered to be in the
    a. primary stage.
    b. secondary stage.
    c. latent stage.

13. Syphilis is considered confirmed when
    a. T. pallidum is found on direct microscopic observation.
    b. a positive nontreponemal particle agglutination assay (TP-PA) is obtained.
    c. a positive nontreponemal test is followed by positive treponemal test.

14. Which statement is accurate about syphilis screening?
    a. Nontreponemal antibodies are detected within 1 week of inoculation of T. pallidum.
    b. The CDC recommends screening for syphilis with treponemal testing followed by nontreponemal testing.
    c. Nontreponemal and treponemal testing each have a sensitivity of just 60% to 70%.

15. Using the CDC guidelines, a nonpregnant, immunocompetent patient with primary early latent syphilis should receive
    a. doxycycline 100 mg orally four times daily for 7 days.
    b. tetracycline 500 mg orally once daily for 28 days.
    c. penicillin G benzathine 2.4 million units I.M. as a single dose.

16. If the patient with early syphilis complains of fever, myalgia, and headache within the first 24 hours of antibiotic treatment, it may be symptomatic of
    a. endarteritis.
    b. neurosyphilis.
    c. Jarisch-Herxheimer reaction.

17. At 1 year, a successful response to treating early latent syphilis would demonstrate
    a. threefold reduction in the treponemal titer.
    b. fourfold reduction in the nontreponemal titer.
    c. negative CSF analysis.

18. If the patient has received a diagnosis of secondary syphilis within the past 90 days, their sex partner should
    a. be treated presumptively, regardless of the serologic testing results.
    b. be treated for syphilis only if the treponemal titer is positive.
    c. not be treated if serologic testing is negative.