NEW WAYS OF APPROACHING SEPSIS WILL IMPROVE PATIENT OUTCOMES
August 2018 (This form may be photocopied. It is no longer valid for CEUs after February 29, 2020.)

CONTINUING EDUCATION TEST

TEST QUESTIONS
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1. How many cases of sepsis are documented in the United States each year?
   - a. 0.5 million
   - b. 1.5 million
   - c. 2.5 million
   - d. 3 million

2. What is the main pathology associated with sepsis?
   - a. kidney failure
   - b. respiratory failure
   - c. multiple organ failure
   - d. none of the above

3. The syndrome of sepsis carries a high mortality rate and is the most expensive inpatient medical condition to treat.
   - a. True
   - b. False

4. Sepsis most commonly occurs in
   - a. neonates.
   - b. infants.
   - c. young adults.
   - d. the elderly.

5. Which is defined as life-threatening organ dysfunction caused by a dysregulated host response to infection?
   - a. Sepsis-1
   - b. Sepsis-2
   - c. Sepsis-3
   - d. Sepsis-4

6. The innate immune response helps to eliminate infectious pathogens through
   - a. signaling cascades on cell surface receptors that generate and release inflammatory cytokines.
   - b. the activation of monocytes and antigen presentation.
   - c. antibody production of B-lymphocytes.
   - d. none of the above

7. The innate immune response has been implicated in the pathogenesis of many inflammatory disorders, including sepsis.
   - a. True
   - b. False

8. What type of cell has been associated with adaptive immunity antigen presentation and plays a role in immunity against sepsis infections?
   - a. neutrophil
   - b. basophil
   - c. B-lymphocyte
   - d. monocyte

9. Which modality/modalities should a sepsis diagnosis include?
   - a. laboratory
   - b. clinical
   - c. imaging
   - d. all of the above

10. Which risk factor appears to be the most significant in the development of sepsis?
    - a. diabetes
    - b. obesity
    - c. hematologic cancers
    - d. HIV

11. What factors contribute to concerns about microbial culture being the standard for detection of infection?
    - a. It is time-consuming and requires specialized training.
    - b. It requires specialized training and has a high cost.
    - c. It is time-consuming and has a high rate of false negatives.
    - d. It requires specialized training and has a high rate of false negatives.

12. The five most common sites of sepsis infection, from first through fifth, are:
    - a. abdominal, wound/soft tissue, respiratory, bacteremia (site unspecified), genitourinary.
    - b. respiratory, bacteremia (site unspecified), genitourinary.
    - c. abdominal, wound/soft tissue, bacteremia (site unspecified), genitourinary, respiratory.
    - d. wound/soft tissue, bacteremia (site unspecified), abdominal.

13. Central venous catheters with embedded diagnostic capability are being explored as an alternative to microbial detection for the diagnosis of sepsis.
    - a. True
    - b. False

14. Which biomarker is synthesized by the liver in response to factors released by macrophages and can be measured to detect inflammation and infection?
    - a. TSH
    - b. CRP
    - c. PCT
    - d. lactate

15. Which biomarker is used to document response to therapy within clinical settings?
    - a. PCT
    - b. CRP
    - c. lactate
    - d. LDH

16. Which biomarker is used as a sensitive marker for the potential development of septic shock?
    - a. LDH
    - b. PCT
    - c. lactate
    - d. CRP

17. Which virus is an increasing cause of sepsis, and which biomarkers are being studied for their clinical utility?
    - a. influenza; IFI27, MxA, 1,3-β-glucan, ASPAG
    - b. norovirus; IFI28, Mxb, BDG, ASPAG
    - c. rhinovirus; IFI27, MxA, 1,3-β-glucan, ASPAG
    - d. RSV; IFI27, MxA, 1,3-β-glucan, ASPAG

18. Which molecule is found in most fungi and could potentially be used for fungal infection detection?
    - a. MxA
    - b. 1,3-β-glucan
    - c. 1,3-β-D-glucan
    - d. IFI27

19. Studies suggest that the best cytokine marker to be used in the investigation of the severity and outcome for sepsis is
    - a. TNF Alpha.
    - b. IL-3.
    - c. IL-8.
    - d. IL-6.

20. Biomarkers are being studied for sepsis detection and diagnosis, including those from blood cells, and it is believed that a combo of biomarkers might provide the best outcome.
    - a. True
    - b. False

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