Work-up of Fever of Unknown Origin in Adult Patients

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The questions below are based on the article "Work-up of Fever of Unknown Origin in Adult Patients," which begins on page 9 of this issue. Choose the single best answer for each question.

1. All of the following evaluations should be included in the initial work-up of classic fever of unknown origin (FUO) EXCEPT
(A) Chest radiograph and cultures of blood, urine, and sputum
(B) Complete blood count with differential and complete metabolic panel
(C) Erythrocyte sedimentation rate
(D) Gallium scan
(E) Serology for Epstein-Barr virus, cytomegalovirus, and hepatitis B and C virus

2. A 25-year-old asymptomatic heterosexual woman recently diagnosed with HIV infection with a CD4 count of 586 cells/mm^3 and a viral load of 85,000 copies is at higher risk than the general population for which of the following?
(A) Cryptococcosis
(B) Esophageal candidiasis
(C) *Pneumocystis jiroveci* (formerly *P. carinii*) pneumonia
(D) Toxoplasmosis
(E) Tuberculosis

3. A 50-year-old man with chronic myelogenous leukemia who underwent chemotherapy 4 weeks ago presents with low-grade fever and mild abdominal pain. He otherwise feels well. During the course of chemotherapy, he had neutropenic fever, which was empirically treated with cefepime, vancomycin, and amphotericin B. Following administration of granulocyte colony-stimulating factor, the patient's neutrophil count improved. All cultures were negative, the fever defervesced, and antibiotics were stopped. Laboratory values were normal except for a mild increase in liver enzymes and an alkaline phosphatase level of 400 U/L. A computed tomography scan of the abdomen and pelvis reveal contrast-enhancing lesions in the liver and spleen. What is the most likely cause for these lesions?
(A) Amebic liver abscess
(B) Aspergillosis
(C) Hepatosplenic candidiasis
(D) Pyogenic liver abscess
(E) *Staphylococcus aureus* endocarditis

4. A 40-year-old man diagnosed with HIV infection presents to the emergency department with an illness of 4 weeks' duration with low-grade fever, weight loss, and malaise and skin lesions that appeared a few days ago. The patient immigrated from southern China to the United States 2 months ago. He was diagnosed with HIV 2 years ago, and his current CD4 count is 100 cells/mm^3. Current medications include suppressive acyclovir for recurrent genital herpes simplex virus infection. Physical examination is normal except for nontender, nonerythematous molluscum-like skin lesions. What is the most likely diagnosis?
(A) Disseminated herpes simplex virus lesions
(B) Herpes zoster
(C) Histoplasmosis
(D) Molluscum contagiosum
(E) *Penicillium marneffei* infection

5. A 32-year-old woman with HIV/AIDS (CD4 count, 25 cells/mm^3) presents for evaluation of FUO. Computed tomography scan of the head reveals 2 ring-enhancing lesions, one in the basal ganglia and the other in the parietal lobe. All of the following are in the differential diagnosis EXCEPT
(A) Aspergillosis
(B) Lymphoma
(C) *Nocardia* infection
(D) Progressive multifocal leukoencephalopathy
(E) Toxoplasmosis

For answers, see page 41.

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Answers to the review questions asked on page 28. The article on work-up of fever of unknown origin in adult patients begins on page 9.

1. (D) Gallium scan
2. (E) Tuberculosis
3. (C) Hepatosplenic candidiasis
4. (E) *Pencillium marneffei* infection
5. (D) Progressive multifocal leukoencephalopathy