

A 40 year-old woman undergoes a gynecological ultrasound for the evaluation and is found is incidentally noted to have a large cyst with septations and intramural calcification in the right lobe of the liver. The patient has previously lived in the Middle East and travels extensively. She denies fever, weight loss, jaundice or anorexia. Which of the following should you recommend?

- a. Ultrasound-guided percutaneous aspiration for cytology and cultures
- b. Oral metronidazole for 10 – 14 days
- c. Oral albendazole for 3 – 6 months
- d. Surgical consultation for right partial hepatectomy
- e. Continued observation with serial cross-sectional imaging to assess for stability



ANSWER: E. Continued observation with serial cross-sectional imaging to assess for stability

Explanation: This patient presents with an incidentally-noted, large, calcified cystic lesion of the liver. *Echinococcus* is endemic to large parts of the Middle East, China and Latin America. The presence of daughter cysts as seen on the ultrasound strongly suggests the diagnosis of echinococcal (hyatid) liver cysts. Humans are accidental hosts and do not play a role in the life-cycle of the organism.

The natural history of hepatic echinococcal cysts is variable, with some patients having stable or slow-growing cysts and others presenting with spontaneous rupture and anaphylaxis. Calcification in the wall of the cyst suggests an inactive cyst. Asymptomatic calcified cysts frequently remain symptom free and treatment is not indicated unless there is evidence of growth (suggesting cyst activity) or the patient develops symptoms.

Ultrasound-guided aspiration (choice A) is incorrect because simple aspiration can lead to cyst content spillage and anaphylaxis. Oral metronidazole (choice B) is the therapy of choice for amebic liver abscesses caused by *Entamoeba histolytica*. Oral albendazole (choice C) is indicated for patients with inoperable cysts or for cysts in multiple organs. Medical therapy is not indicated for patients with calcified cysts. Surgical resection (choice D) is not indicated for patients with calcified cysts.