What is the best imaging modality for the diagnosis of gallbladder carcinoma?

Evidence-Based Answer

Transabdominal ultrasound is the first-line imaging modality to detect clinically suspected gallbladder carcinoma, although estimates of sensitivity vary widely (25%–85%). (SOR: B, based on retrospective cohort studies.) Endoscopic ultrasonography, thin-slice computed tomography (CT), magnetic resonance imaging (MRI), and magnetic resonance cholangiopancreatography (MRCP) can further detail the extent of primary gallbladder carcinoma. (SOR: C, based on expert opinion.)

In the United States, the annual incidence of primary gallbladder carcinoma is 1 to 2.5 per 100,000, while in Japan it is 7 per 100,000. China has had an increasing rate of gallbladder cancer in the past few decades.1

A retrospective US cohort study covering 28 years included 40 patients with proven primary gallbladder carcinoma. Twenty-two of those 40 patients received ultrasounds. Gallbladder masses were found in 11 of those 22 patients (50% sensitivity). CT evaluation had a sensitivity of 40%.2 Another retrospective US cohort study found that 22 of 26 patients with primary gallbladder carcinoma had masses on preoperative ultrasound (85% sensitivity).3

A Japanese retrospective study with 51 patients with known gallbladder cancer reviewed ultrasounds received by 25 of those patients. Nine of the 25 showed the malignancy (36% sensitivity). Only 10 patients with primary gallbladder carcinoma underwent CT, but 7 of those 10 studies revealed the cancer (70% sensitivity).4

In China, a retrospective study of the 199 patients with primary gallbladder carcinoma (between 1985 and 1998) found that only a small percentage of these patients were diagnosed at an early stage (28 of 199 patients). Of those 28 diagnosed at an early stage, only 7 were diagnosed preoperatively by ultrasound, ultrasound plus CT, or endoscopic retrograde choledochopancreatography (25% sensitivity). Ultrasound sensitivity was reduced by thick abdominal walls and overlying bowel gas patterns in this group.5

According to a 2008 Japanese narrative review article, diagnosis of primary gallbladder carcinoma can be approached in a stepwise fashion. The authors asserted that 50% of gallbladder carcinomas are found as tumors on abdominal ultrasound; ultrasound is inexpensive, noninvasive, and widely available; and further investigation to localize the lesion and to assess the degree of extension includes endoscopic ultrasonography, thin-slice CT, MRI, and MRCP.6

What is the most effective treatment for insomnia in the elderly?

Evidence-Based Answer

Cognitive behavioral therapy (CBT) improves certain sleep parameters and should be considered first-line therapy for elderly patients. (SOR: A, based on a systematic review.) Pharmacologic therapy should aim to match the patient’s symptoms with the properties of the drug, with preference given to short- to intermediate-acting benzodiazepine receptor agonists or ramelteon. (SOR: C, based on expert opinion.) Over-the-counter and prescription antihistamines are generally inappropriate for use in the elderly due to adverse effects. (SOR: C, based on expert opinion.)

A Cochrane review of CBT for sleep included 6 RCTs with 282 adults older than 60 years.1 Studies varied in the frequency and specific CBT interventions used. Immediately after treatment, CBT demonstrated improvements compared with baseline in total sleep duration (15 min longer; 95% CI, 7 to 36) and wake after sleep onset (22 min shorter; 95% CI, 6 to 37). Endpoints not achieving statistical significance were early morning wakening and sleep efficiency. After a year or more, a significant effect on wake after sleep onset