

Test Bank for Mosby's Canadian Manual of Diagnostic and Laboratory Tests CDN 2nd Pagana

Pagana: Mosby's Canadian Manual of Diagnostic and Laboratory Tests, 2nd Canadian Edition

Review Questions

Cancer

1. **Question:** A 36-year-old patient indicates that she wants both of her breasts removed because of a strong family history of breast cancer. Her mother developed breast cancer at age 45 and died of that disease at age 50. Her older sister is now dying of breast cancer at age 44. The patient has two young daughters and does not want to risk dying before her children grow up. What advice should the nurse give her?
2. **Question:** A 48-year-old patient is concerned about the radiation exposure risk associated with mammography. She would like to undergo breast scintigraphy instead. What advice should the nurse give her?
3. **Question:** During a routine evaluation, a patient is found to have a suspect lesion on mammography. Her physical examination results are negative, and she has no palpable masses. Should a biopsy of this mass be performed?
4. **Question:** The patient is a 56-year-old woman who had a colon cancer removed 2 years ago. Her carcinoembryonic antigen (CEA) level is now 4.2 mcg/L. Is this significant?
5. **Question:** A 62-year-old patient is admitted to the hospital for melanoma. During his staging workup, a bone scan is performed. The bone scan is normal except for a "hot spot" in the right rib. What might have caused this abnormality?
6. **Question:** A 22-year-old female patient complains of right upper quadrant abdominal pain. Gallbladder ultrasonography and upper gastrointestinal endoscopy are performed, and the results are negative. A liver-spleen scan indicates a filling defect in the anterior surface of the liver. Does this indicate a liver tumour?
7. **Question:** A patient with a diagnosis of pancreatic cancer has recently been admitted to the hospital with a rapid onset of ascites. She is extremely uncomfortable and anxious to institute treatment for this symptom. The nurse is aware that the CA 19-9 tumour marker tests have been performed. What is the purpose of the CA 19-9 marker and how could it influence care?

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Review Questions Answer Key

Cancer

1. **Question:** A 36-year-old patient indicates that she wants both of her breasts removed because of a strong family history of breast cancer. Her mother developed breast cancer at age 45 and died of that disease at age 50. Her older sister is now dying of breast cancer at age 44. The patient has two young daughters and does not want to risk dying before her children grow up. What advice should the nurse give her?

Answer: This woman does have a significant family history of breast cancer and may have a breast cancer antigen (*BRCA*) genetic defect. If appropriate, the nurse should provide information on how the patient and her sister could be tested for the *BRCA* gene. If the test is positive, further genetic consultation is required. It is important to inform the *BRCA*-negative patient that her risk is still similar to that of the general public.

Reference page: 1140

2. **Question:** A 48-year-old patient is concerned about the radiation exposure risk associated with mammography. She would like to undergo breast scintigraphy instead. What advice should the nurse give her?

Answer: Mammography is an X-ray examination of the breast that is performed with exposure to approximately 0.5 rad of radiation per view. Scintigraphy involves an injection of an intravenous radionuclide and the use of a gamma ray scintigraphy camera to pass over the breasts and record radioactive uptake or “hot” or “cold” spots. Because the amount of radionuclide used in scintigraphy is small, there is a relatively low risk of radiation exposure; however, mammography has an even lower risk of radiation exposure than scintigraphy.

Reference page: 1088

3. **Question:** During a routine evaluation, a patient is found to have a suspect lesion on mammography. Her physical examination results are negative, and she has no palpable masses. Should a biopsy of this mass be performed?

Answer: Mammography can be used to locate a mammographically identified (i.e., not palpable) lesion for biopsy, but follow up is required. It is important to inform the patient that further testing is not uncommon after a mammograph. If the radiologist sees something that should be more thoroughly evaluated with magnified views, deeper views, or ultrasonography, the patient may be called back for further testing, prior to performing a biopsy.

Reference page: 1088

4. **Question:** The patient is a 56-year-old woman who had a colon cancer removed 2 years ago. Her carcinoembryonic antigen (CEA) level is now 4.2 mcg/L. Is this significant?

Answer: This patient's CEA level is elevated, but not above normal. This test is used in the surveillance of patients with cancer. A steadily rising CEA level is occasionally the first sign of tumour recurrence. Therefore, CEA testing is very valuable in the follow-up of patients who have already had potentially curative therapy. However, many (~20%) patients with advanced breast or gastrointestinal tumours may not have elevated CEA levels. Without knowing this patient's prior CEA levels, it is not certain that the level represents recurrent disease. However, if continued monitoring reveals a rising CEA level on successive tests, it may be indicative of cancer recurring in this patient.

Reference page: 160

5. **Question:** A 62-year-old patient is admitted to the hospital for melanoma. During his staging workup, a bone scan is performed. The bone scan is normal except for a "hot spot" in the right rib. What might have caused this abnormality?

Answer: Increased uptake on a bone scan, or hot spots, may indicate areas of osteoblastic or new bone growth around areas, or abnormality such as a tumour, arthritis, or injury. Hot spots can be caused by many factors including tumour metastatic to the bone, an old healed fracture, arthritis, or benign bone disease. In this case, radiography of the rib was performed, and an old healed rib fracture was identified. According to a more accurate history from the patient, he had fallen several years ago and had severe pain in that area for more than 2 weeks. This history is compatible with a previous fracture of the rib.

Reference page: 810

6. **Question:** A 22-year-old female patient complains of right upper quadrant abdominal pain. Gallbladder ultrasonography and upper gastrointestinal endoscopy are performed, and the results are negative. A liver-spleen scan indicates a filling defect in the anterior surface of the liver. Does this indicate a liver tumour?

Answer: No. Many diseases can produce an abnormal liver scan such as this. Benign tumours (e.g., adenomas, cysts, congenital abnormalities) can cause such an appearance. Computed tomography should be performed to eliminate the possibility of a cyst. CT-guided liver biopsies also can be performed to elucidate more clearly the cause of this abnormal liver scan. If these procedures fail to resolve the problem, peritoneoscopy with actual visualization of that portion of the liver can be performed.

Reference page: 836

7. **Question:** A patient with a diagnosis of pancreatic cancer has recently been admitted to the hospital with a rapid onset of ascites. She is extremely uncomfortable and anxious to institute treatment for this symptom. The nurse is aware that the CA 19-9 tumour marker tests have been performed. What is the purpose of the CA 19-9

marker and how could it influence care?

Answer: CA 19-9 antigen is a tumour marker used for the diagnosis of pancreatic or hepatobiliary cancer, evaluation of response to treatment, and surveillance. If the CA 19-9 level is greatly elevated in this patient, it could indicate the presence of a pancreatic mass or biliary obstruction which would help to explain the ascites. A rapid rise in CA 19-9 levels could also be associated with recurrent or progressive tumour growth resulting in a shift of fluids and abdominal ascites. The CA 19-9 marker could help to determine the cause of the ascites and thus influence medical or surgical care.

Reference page: 145