Mrs. Miller is an 88-year-old woman who presented with complaints of nausea, vomiting, and abdominal pain. Her vital signs on admission are temperature 99.6°F (37.6°C), blood pressure 113/82, pulse 84, and respiratory rate 20. Her laboratory tests reveal white blood cell count (WBC) 13,000/mm³, potassium (K) aspartate aminotransferase (AST) 142 U/L, and alanine aminotransferase (ALT) 390 U/L. Physical examination reveals a distended abdomen that is very tender on palpation. Bowel sounds are present in all four quadrants, but hypoactive. Mrs. Miller is admitted with a diagnosis of acute pancreatitis. She will be kept NPO. Intravenous fluid of D5 ½ NS with 40 mEq of potassium chloride (KCL) per liter at 100 cc per hour is prescribed. The health care provider prescribes continued administration of her preadmission medications, that is pantoprazole sodium and levothyroxine sodium (in IV form since the client is NPO) and spironolactone (available in oral form), and adds the prescription of IV metoclopramide and morphine sulfate. A nasogastric (NG) tube is inserted and attached to low wall suction. She is scheduled to have a kidneys, ureters and bladder (KUB) abdominal x-ray in the morning.

CASE STUDY

Mrs. Miller’s NG tube is draining yellow-brown drainage. Her pain is being managed effectively with IV morphine 4 mg every four hours. She is NPO and awaiting transport to radiology for a KUB. Mrs. Miller is anxious and has many questions for the nurse: “What is the test I am having done today? What is pancreatitis? Will I need to have surgery? Why did they put this tube in my nose? When will I be able to eat real food?”

Questions:

1. Briefly explain acute pancreatitis and discuss its incidence.
2. Mrs. Miller’s admitting diagnosis is acute pancreatitis. Can a person have chronic pancreatitis? If so, what is the incidence, and how would you define chromic pancreatitis?
3. Discuss the common clinical manifestations of acute pancreatitis.
4. Briefly discuss the diagnostic tests that help confirm the diagnosis of pancreatitis.
5. Identify the assessment findings in Mrs. Miller’s case that are consistent with acute pancreatitis.
6. Mrs. Miller asks, “What is the test I am having done today?” How would the nurse describe a KUB to Mrs. Miller?
7. Identify the possible causes of acute pancreatitis. Discuss the physiology of the two major causes of acute pancreatitis in the United States, and note which individuals are at greatest risk.
8. The severity of an acute pancreatitis episode can be assessed using two tools: (1) Ranson/Imrie criteria and (2) modified Glasgow criteria. Describe each of these tools.
9. Briefly discuss the treatment options for pancreatitis, and explain why Mrs. Miller has an NG tube to low wall suction. How will the nurse determine if the NG tube is functioning?

10. Discuss the complication that can arise if pancreatitis is not treated.

11. Evaluate Mrs. Miller’s potassium level. Should the nurse question the health care provider’s prescription for the diuretic spironolactone? Why or why not?

12. Because Mrs. Miller is NPO, the nurse must administer the oral spironolactone via the NG tube. Is it appropriate to crush this medication? Why or why not? What intervention should the nurse take following administration of the medication to facilitate absorption?

13. Which type of diet will Mrs. Miller advance to when her NPO status is discontinued? What types of liquids are allowed on this diet?

14. Identify the priority nursing diagnosis for Mrs. Miller’s plan of care and two additional nursing diagnoses that the nurse should consider.