

Case Study: Pancreatitis Due 3/28/20

A 44-year-old male patient has been admitted to the medical-surgical unit of the hospital after seeking treatment for nausea, vomiting, and severe abdominal pain. The patient developed sudden and intense pain in the right upper quadrant the evening before and waited a few hours before seeking treatment. He has a history of substance abuse and has been in rehabilitation for both alcohol and stimulant abuse. He currently still uses both alcohol and methamphetamines, despite previous attempts of treatment at detoxification centers.

Upon admission, the patient is anxious and restless, complaining of severe pain that is unrelieved by pain medication. The nurse contacts the provider to ask for further orders for opioid medications to treat the pain. The provider also orders further diagnostic tests to confirm the cause of the patient's pain and symptoms as well as a **500mL bolus of Lactated Ringer's solution IV, followed by a regular rate of LR at 150 mL/hour. How long will this IV run at 150 mL/hour 3 hrs 20 minutes**

Please answer questions completely and use references

1. What types of diagnostic tests would most likely be ordered that could determine the cause of this type of abdominal pain? And why do you choose those diagnostic tests?

The following test that would most likely be ordered is the blood test which, checks for amylase and lipase for the digestive system for enzymes of the pancreas.

CT scan will indicate if the patient has gallstones and or the extent of a pancreas inflammation

Endoscopic ultrasound to look for inflammation or blockages in the pancreatic duct or bile duct.

lastly, an MRI will detect abnormalities in gallbladder, pancreas, and duct.

2. What laboratory tests would the provider most likely order? And why do you think certain lab tests would be chosen?

The following test that would most likely be ordered is the blood test which, checks for amylase and lipase for the digestive system for enzymes of the pancreas.

Stool test which will measure levels of lipids in stool, in turn, indicates the digestive system function isn't absorbing nutrients.

CMP, CBC to check for infections, Glucose,

3. What effects would the patient's history of drug and alcohol abuse have on his abdominal pain? What do you believe is the diagnosis for this patient and why?

I believe a patient who has a history of drugs and alcohol abuse should consider stopping smoking and alcohol have cofactor in the disease which becomes prevalent African Americans, Latinos, and whites. The continuation of smoking and alcohol abuse will constrict movement in the GI tract. This patient has signs of a chronic/ acute pancreatitis pain is in the upper right quadrant. This may be due to excessive drinking.

After answering these questions see next page:

The provide orders for an abdominal ultrasound and several laboratory tests, including a CBC, CMP, Glucose, Serum amylase, and serum lipase. **The nurse is also given an order for IV fentanyl to be given prn every 4 hours for pain control. (What is wrong with this order?) There is no dosage given this patient** After undergoing the ultrasound, the provider considers the patient may have acute pancreatitis caused by inflammation: there are several lesion noted on the pancreas that may have been caused by chronic alcohol use.

4. Based on the diagnosis of acute pancreatitis, what laboratory values would the nurse expect to see in this patient? What certain lab values would be abnormal and why? What are the labs that pertain to pancreatitis? Why are these labs abnormal with pancreatitis? Were you right in questions 1, 2 & 3 about labs, diagnostics, and diagnosis?

Values that would increase is the amylase and lipase anything above 200 U/L AST, ATL, Glucose, Calcium, Magnesium, C-reactive protein measures inflammation CMP. the abnormal finding will be amylase and lipase for they are produced in the pancreas and are to break down starch into glucose to supply the body with energy. With the following questions, I believe I was correct in my answer.

5. Why is pain control such an important component of the management of acute pancreatitis?

Because with an elevated pain level there is no certainty of where the pain may be coming from we as nurses want to pinpoint the main source and reduce pain in order to see if further precautions are to be made for example surgery lab test CT scans.

6. What are some other orders would the nurse expect from the provider?

acute pancreatitis would consist of cbc, cmp, triglycerides, glucose, magnesium, c-reactive protein.

7. What teaching should be done for this patient?

- take the medication exactly as directed for pain
- eat a low fat diet
- stop alcohol/smoking consumption if it is what causes pancreatitis
- exercise

References

Hinkle, J. L., Cheever, K. H., & Brunner, L. S. (2018). *Brunner & Suddarth's textbook of medical-surgical nursing* (14th ed.). Wolters Kluwer.

Pancreatitis. (2020). Retrieved from <https://www.mayoclinic.org/diseases-conditions/pancreatitis/diagnosis-treatment/drc-20360233>