

A Case of Acute Pancreatitis

by

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Case Presentation

George Hendrix is a 38-year-old man who has abused alcohol his entire adult life. Recently, following an episode of binge drinking, George experienced a gradual onset of pain in his upper abdomen that radiated to his back. The pain persisted for several hours and worsened each time that he ate. He also felt nauseous and experienced repeated episodes of vomiting. The pain grew more intense and George decided to drive himself to the emergency room of his local hospital. The physician who examined George in the ER noted the following findings when she performed a physical exam: Intense pain upon palpation of the upper left quadrant of the abdominal cavity, gaseous distension of the intestinal tract, and tachycardia. The physical exam findings, together with the history of alcohol abuse and the results of a CBC, serum chemistry panel, and abdominal ultrasound, led the physician to conclude that George was suffering from a case of acute pancreatitis. The doctor immediately initiated the appropriate medical therapy.



Questions

1. Describe the anatomic location of the pancreas relative to the other organs in the upper portion of the abdominal cavity.
2. Describe the functional anatomy of the duct system that conveys bile from the liver and digestive juice from the pancreas to the lumen of the duodenum.
3. Briefly outline the endocrine and exocrine functions of the pancreas.
4. Describe the hormonal control of the secretion of bile and pancreatic juice during the digestive process.
5. Explain why proteases are secreted in an inactive state and describe the means by which proteases are activated in the stomach and small intestine.
6. What is pancreatitis and what is the basic mechanism that underlies the condition?
7. List the most common causes of pancreatitis.
8. List the symptoms, signs, and laboratory findings associated with pancreatitis, and state which of these George presents with.
9. Explain what is meant by the phenomenon of referred pain. Is this phenomenon often seen in patients with acute pancreatitis?
10. Describe the treatment of the condition and its prognosis.

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