

A Patient with Abdominal Pain and Vomiting

A 39-year-old woman is admitted to you because of severe abdominal pain and vomiting. She states that her illness began about 3 days ago with midepigastic pain and nausea, and progressed to severe abdominal pain, nausea and vomiting. She describes her pain as crampy, without any radiation, and continuous throughout the day so that she cannot eat. She denies back pain, flank pain, diarrhea, dysuria, hematuria, cough or any similar episode of pain before. She denies eating any unusual foods, and her medications include NSAIDs for headaches, and oral contraceptives; she recently took a course of metronidazole for *Trichomonas vaginitis*. She is employed as a corporate vice-president, and lives with her daughter and husband. She does not smoke cigarettes and drinks alcohol only on social occasions. Her parents both died of cancer and she had a sister who committed suicide.

PE reveals a thin woman lying on her side in a fetal position. T 99, P 130, R 20, BP 100/82. SKIN - warm, dry without lesions. LN - none. HEENT - normal with dry mucosa. CHEST - clear. HEART - RRR 2/6 SEM; no rub or gallop. ABD - scaphoid with diffuse tenderness to light palpation especially in midepigastrium; voluntary guarding in all quadrants; no rebound; no organomegaly or palpable masses; BS absent. PELVIC - normal with normal rectum. Stool trace heme positive. NEURO - nonfocal.

LABS Na 142, K 3.1, Cl 100, HCO₃ 36, Cr 1.2, glu 60
Hb 13.3, Hct 39.7, WBC 14.8 (88 segs, 10 bands, 2 lymphs)
UA - normal; ABG (RA) 7.50/38/64
AST 102; ALT 75; Alk Phos 126; Amylase 806; Lipase 5.3
EKG - Sinus tach 130/flattened T waves in V2-V6
CXR - atelectasis at both bases; small left pleural effusion

1. What is the differential diagnosis of this patient's abdominal pain? Which is most likely?
2. What are the major causes of acute pancreatitis?
3. What is its presumed pathogenesis?

4. Are imaging studies helpful at this point?

5. The patient undergoes abdominal ultrasound which reveals no gallstones. How would you manage this patient the day of admission?

6. Five days later the patient is febrile with continued abdominal pain and elevated amylase. What would your concerns be, and what would you do?

7. The next day the patient has continued severe pain and fever despite your therapy, and she develops dyspnea, and hypotension. The serum amylase increases to 1200, platelet count drops to 60K and CXR reveals bilateral interstitial infiltrates. What potential complications can account for her clinical course? Are there features at presentation that could have predicted this subsequent clinical course?

8. Although the patient describes herself as only a “social drinker”, her husband phones to tell you that he is concerned because she has been drinking several vodka drinks each night and asks if her drinking is related to her illness. How do you respond?