

**Laboratory evaluation of gastrointestinal diseases**

1. A 60 year-old man complains of weight loss, diarrhea alternating with constipation. The patient is pale (anemic).  
What tests would you perform?
2. A patient with symptoms of chronic alcoholism complains of recurrent abdominal pain, meteorism. He has lost weight in the past few months, his stools are voluminous, difficult to flush.  
serum Ca: 2.1 mmol/l  
prothrombin time INR: 2.6; normalized after vitamin K administration  
serum glucose (fasting): 12 mmol/l  
ALP: 264 U/l  
albumin: 40 g/l  
fecal elastase: decreased  
abdominal ultrasound: enlarged pancreas  
What is your diagnosis? What other tests would you do?
3. A patient complains of intense periumbilical pain of sudden onset. His blood pressure is low, the pulse is fast, he is sweating and has nausea. There is no defense on physical examination of the abdomen.  
Laboratory results:  
ESR: 42 mm/h  
WBC: 11 G/l  
serum  $\alpha$ -amylase: 1800 U/l  
urine  $\alpha$ -amylase: increased  
serum lipase: increased  
serum urea: 10 mmol/l  
serum creatinine: 90  $\mu$ mol/l  
serum Ca: 1.9 mmol/l  
serum albumin: 30 g/l  
fasting blood glucose: 6.5 mmol/l.  
What is your diagnosis? What other tests would you perform?
4. A 35 year-old man complains of heartburn and occasional regurgitation of sour material in his mouth, mostly in the morning especially if leaning down. These symptoms were provoked by drinking beer the evening before. Findings of an esophago-gastro-duodenoscopy: the proximal part of the esophagus is normal, but the distal part is hyperemic with erosions. The cardia is loose, the antrum is hyperemic in patches. The bulbus and the postbulbar duodenum is normal.  
What is your diagnosis? What further test and treatment should be considered?

*Pathophysiology lab questions*

5. A 45 year old patient complains of maldigestion, increasing abdominal pain and weakness. Abdominal discomfort occurs shortly after meals or alcohol ingestion. Laboratory results:  
Haemoccult: +  
anemia  
What tests would you do, what are the treatment options?
  
6. What tests would you perform if you suspect your patient has an autoimmune inflammatory bowel disease?
  
7. A 30 year-old man complains of recurrent abdominal pain usually accompanied with diarrhea. These symptoms occur after the ingestion of fresh dairy products or alcohol.  
What may be the cause of these complaints? What tests would you do?