



# HOW TO APPROACH ABDOMINAL PAIN ?

Color index :

**Important**

Further explanation

[Editing link](#)

# DIFFERENTIAL DIAGNOSIS:

## ACUTE: <3m

- **Appendicitis** → sudden-onset severe abdominal pain, often starts periumbilical with migration to right lower quadrant; nausea, vomiting, anorexia, fever, more common in children and young adults
- **Diverticulitis** → hx of diverticulosis; persistent left lower quadrant pain; fever, anorexia, nausea, vomiting, and abdominal distension (with ileus); patient may have a known hx of diverticulosis
- **Pancreatitis** → acute onset, constant, severe midabdominal/epigastric pain that often radiates to the back; nausea, vomiting; hx of biliary colic, alcohol abuse
- **Bowel Obstruction**
  - 1) **Adhesions** → hx of abdominal or pelvic surgery; intermittent, cramp-like abdominal pain; nausea and/or vomiting, constipation, absence of flatus
  - 2) **Incarcerated/strangulated hernia** → hx of hernia, intermittent, cramp-like abdominal pain; nausea, vomiting, constipation, and absence of flatus
- **Cholecystitis** → hx of cholelithiasis and biliary colic; RUQ pain radiate to the right shoulder or back exacerbated by eating (especially fatty foods); fever, nausea, and/or vomiting; more common in women than men; risk factors include obesity, age over 50, pregnancy
- **cholangitis** → Charcot's triad: RUQ, pain, fever, and jaundice
- **nephrolithiasis** → previous hx of stones, severe abdominal flank pain radiating to the groin; other symptoms include nausea, vomiting, diaphoresis, hematuria; urinary frequency/urgency;
- **perforated peptic ulcer** → sudden severe and epigastric constant pain, All movement, including respiration, makes the pain worse, causing the patient to lie immobile on the bed. Hx of Ulcer, NSAID use H.pylori
- **aortic dissection** → severe, sharp or tearing pain in thorax or abdomen, pain radiates to the back, hx of hypertension, increased risk in Marfan and Ehlers-Danlos syndrome or other collagen vascular disorders
- **ectopic pregnancy** → vaginal bleeding with severe, usually unilateral pelvic pain; amenorrhea or painless vaginal bleeding; hx of recent early pregnancy or missed last menstrual period
- **acute intestinal ischemia** → age >50 years; constant periumbilical nonradiating abdominal pain; recent hx of postprandial abdominal pain; hx of atrial fibrillation, coronary artery disease, MI, and CHF; risk factors include smoking, hypertension, hyperlipidemia, and diabetes

## CHRONIC: >3m

- **IBS** → abdominal pain with alteration of bowel habits; pain relieved with defecation; may be associated with diarrhea or constipation, or both; exacerbated by psychosocial stressors
- **IBD**
  - ulcerative colitis** → bloody diarrhea is the principle symptom, defecation may relieve the lower abdominal cramps
  - crohn's** → crampy abdominal pain, intermittent diarrhea, weight loss, fatigue, FHx of inflammatory bowel disease

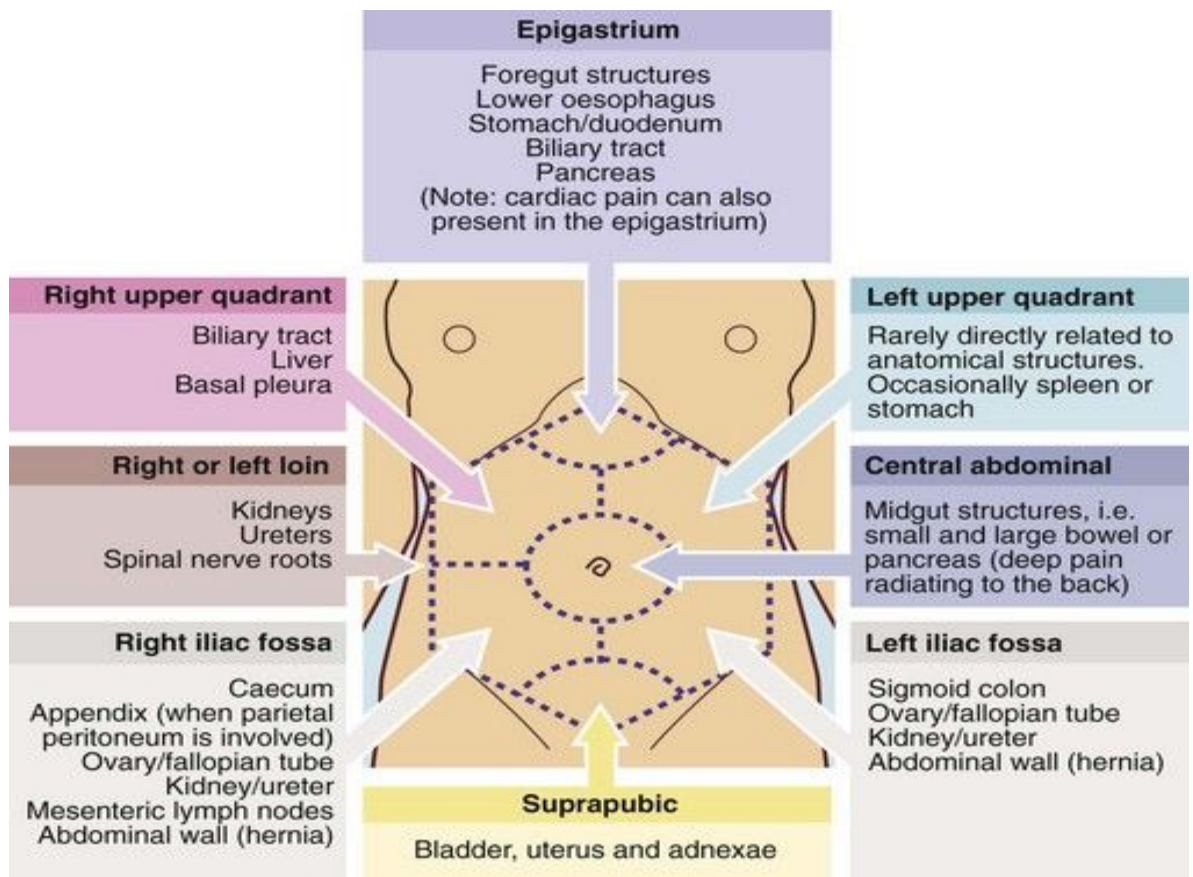
- **PUD** → epigastric pain, may be worsened or relieved by food, hx of NSAID and alcohol use, hx of black stool, hematemesis
- **chronic cholecystitis** → upper abdominal indigestion-like pain after eating, Hx of gallstones
- **Celiac disease** → nonspecific abdominal pain, bloating; diarrhea; greasy, foul-smelling stools; weight loss; anemia, ataxia, osteoporosis
- **GERD** → burning epigastric/chest pain, heartburn, regurgitation worse with some foods and recumbence; improved by antacids
- **chronic intestinal ischemia** → dull, crampy, periumbilical abdominal pain, comes after the meal by 1h, the patient is usually smokier and having other atherosclerotic disease (CAD, intermittent claudication)

### Determine The Level Of Bowel Obstruction

Symptom	Gastric or proximal small bowel obstruction	Distal small bowel or large bowel obstruction
<b>Pain</b>	<ul style="list-style-type: none"> <li>• <b>Early symptom.</b></li> <li>• <b>Central (peri-umbilical).</b></li> <li>• <b><u>Short intermittent</u></b> cramps.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Late symptom.</b></li> <li>• Localized in the <b>lower third of abdomen.</b></li> <li>• <b><u>Long intervals</u></b> between cramps.</li> </ul>
<b>Vomiting</b>	<ul style="list-style-type: none"> <li>• <b>Develops early.</b></li> <li>• With <b>pyloric obstruction</b>, the vomitus is <b>watery and acid.</b></li> <li>• High small bowel obstruction produces a <b>bile-stained vomit.</b></li> <li>• <b>Large amounts.</b></li> <li>• <b>No or little odor.</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Develops later.</b></li> <li>• Obstruction in the lower part of the small bowel is associated with a <b>brown vomit with foul smelling</b> (feculent vomit).</li> <li>• <b>Small volumes.</b></li> <li>• <b>Foul odor.</b></li> <li>• Vomiting is unusual.</li> </ul>
<b>Abdominal distension</b>	Usually <b>not</b> associated with distension.	Distension is around the periphery of the abdomen. If small bowel obstruction is present, distension will be in the center.
<b>Absolute constipation</b> (both feces and gass cant pass)	This occurs <b>late</b> in high small bowel obstructions.	<ul style="list-style-type: none"> <li>• Once an obstruction is complete and the bowel below is empty, absolute constipation develops.</li> <li>• This occurs <b>early</b> in lower large bowel obstructions.</li> </ul>

Question	Think about
<b><u>SOCRATES</u></b>	
Where is the pain ?	<b>epigastric:</b> pancreatitis, peptic ulcer, obstruction of cystic duct, myocardial infarction “MI”, aortic dissection <b>RUQ:</b> cholecystitis, gall stones <b>RLQ:</b> appendicitis, inguinal Hernia <b>LUQ:</b> peptic ulcer, pancreatitis <b>LLQ:</b> diverticulitis, inguinal Hernia <b>Flank:</b> renal colic, pyelonephritis <b>Periumbilical:</b> small bowel obstruction
When did the pain start ?	Acute:<12 weeks Chronic:>12 weeks
- How long have you had the pain? - Has the pain been persistent or intermittent over this period of time? - What has been done to treat the pain?	Severe constant pain last for hours = Biliary colic +renal colic
Can you describe the pain ?	★ Tearing?aortic dissection ★ Aortic dissection ★ Col? biliary colic, renal colic, intestinal obstruction, IBS ★ dull? MI ★ heart burning? peptic ulcer ★ sharp? appendicitis
Does the pain radiate to the back?	★ Pancreatitis ★ Duodenal ulcer ★ Gastric ulcer ★ Aortic dissection
Does the pain radiate to the right shoulder?	★ Biliary colic, ★ Cholecystitis
Does the pain radiate to the left shoulder?	★ Splenomegaly ★ Splenic infarction
Dose the pain radiate to the Neck ?	★ GERD
Does the pain radiate to the left arm or neck?	★ Myocardial ischemia
Did the pain your lower right abdomen suddenly improve from 8 or 9 to a 2 or 3?	★ Perforated appendix
Did the pain hurt the most at its onset?	★ Aortic dissection
Does eating worsen the pain?	★ Pancreatitis ★ Gastric ulcer ★ Mesenteric ischemia
Does eating fatty food worsen the pain?	- biliary colic
Does eating alleviate the pain?	★ Duodenal ulcer ★ GERD
do you need to roll around to get some relief ?	★ Colicky pain
dose the pain get relief when you lie forward ?	★ Pancreatitis
does the pain get relief by sty still	★ peritunitits

dose the pain increase with movement ?	★ Appendicitis
Is the pain associated with nausea and vomiting?	<ul style="list-style-type: none"> <li>★ Pancreatitis</li> <li>★ Bowel obstruction</li> <li>★ Biliary colic</li> <li>★ pregnancy</li> <li>★ Drugs</li> </ul>
Is the pain associated with emesis of undigested food?	★ Esophageal obstruction
Is the pain associated with emesis of undigested food with acidic, digestive juices from the stomach but no bile?	<ul style="list-style-type: none"> <li>★ Gastroparesis</li> <li>★ Gastric outlet obstruction</li> </ul>
Is the emesis bloody?	<ul style="list-style-type: none"> <li>★ Esophageal or gastric varices</li> <li>★ PUD</li> <li>★ Gastric cancer</li> <li>★ Aortoenteric fistula</li> </ul>
loss of weight and appetite ?	★ GI malignancy
weight loss with increase appetite ?	<ul style="list-style-type: none"> <li>★ Malabsorption</li> <li>★ Hypermetabolic states</li> </ul>
Anemia ?	★ Ischemic pain
Is the pain continuous with intermittent waves of worsening pain?	<ul style="list-style-type: none"> <li>★ Biliary colic</li> <li>★ Renal colic</li> <li>★ Small bowel obstruction</li> </ul>
Are there multiple waves of pain that increase in intensity, then stop abruptly for short periods of time?	★ Small bowel obstruction
Risk factors	
Fatty food - Obesity - smoking - stress - prior abdominal surgery - Hx of gallstones - Viral infection - alcohol Biliary tract disease	
PMHx PSHx	
Similar symptoms ?	Relapsing and remitting pain usually suggest PUD
surgical procedures and Blood transfusion ?	
any previous investigation	ERCP or Biopsy or Endoscopy
Did you recently take antibiotics?	★ Colitis due to Clostridium difficile
Does the pain occur once monthly around 2 weeks after the beginning of your menses, occasionally associated with vaginal spotting?	<ul style="list-style-type: none"> <li>★ Mittelschmerz*</li> </ul> <p>Mittelschmerz is the pelvic pain that some women experience during ovulation.</p>
Social Hx	
Occupation	TCC
Recent travel Hx to area hepatitis is endemic? IV drugs	Hepatitis
Alcohol intake	liver disease pancreatitis



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