

Abdominal pain

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Abdominal pain

- Abdominal pain is a symptom of many different conditions, ranging from acute self-limiting problems to life threatening conditions such as ruptured appendicitis and bowel obstruction.
- The most common conditions that present to community pharmacies are dyspepsia affecting the upper abdomen and IBS affecting the lower abdomen.

Prevalence and epidemiology

- abdominal pain it is likely that the majority of the population had suffered from dyspepsia during the previous 12 months and gastroenteritis, which is commonly associated with abdominal pain, is extremely common.

Aetiology

- Abdominal pain does not only arise from the GI tract but also from the cardiovascular and musculoskeletal system.
- aetiology of abdominal pain is dependent on its cause.
 - GI tract causes include poor muscle tone leading to reflux (e.g. lower oesophageal sphincter incompetence), infections that cause peptic ulcers (from *H. pylori*)
 - mechanical blockages causing renal and biliary colic
 - Cardiovascular causes include angina and myocardial infarction
 - musculoskeletal problems often involve tearing of abdominal muscles.

Specific questions to ask the patient:

Abdominal pain

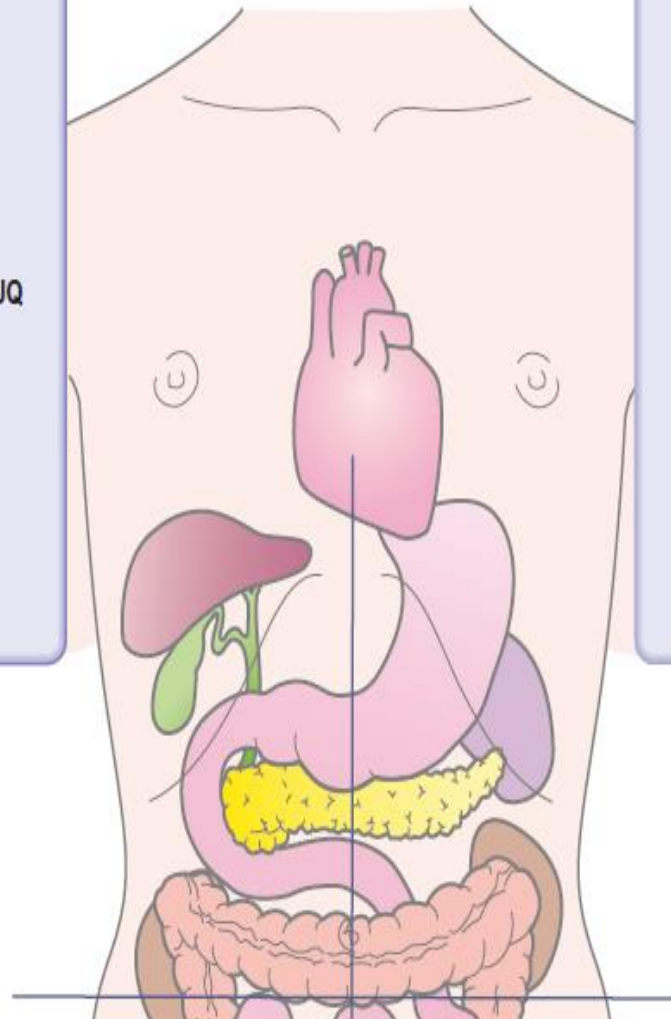
- Location of pain Knowing the anatomical location of abdominal structures is helpful in differential diagnosis of abdominal pain

Structures located in the RUQ

Liver
Gall bladder
Duodenum
Head of the pancreas
Right adrenal gland
Portion of the right kidney
Portions of the ascending
and transverse colon

Conditions arising from the RUQ

Biliary colic
Hepatitis
Peptic ulcer
Pancreatitis
Renal colic
Herpes zoster
Myocardial ischaemia



Structures located in the LUQ

Left lobe of liver
Stomach
Spleen
Body of the pancreas
Left adrenal gland
Portion of the left kidney
Portions of the transverse and
descending colon

Conditions arising from the LUQ

Gastritis
Splenic enlargement or rupture
Pancreatitis
Renal colic
Herpes zoster
Myocardial ischaemia

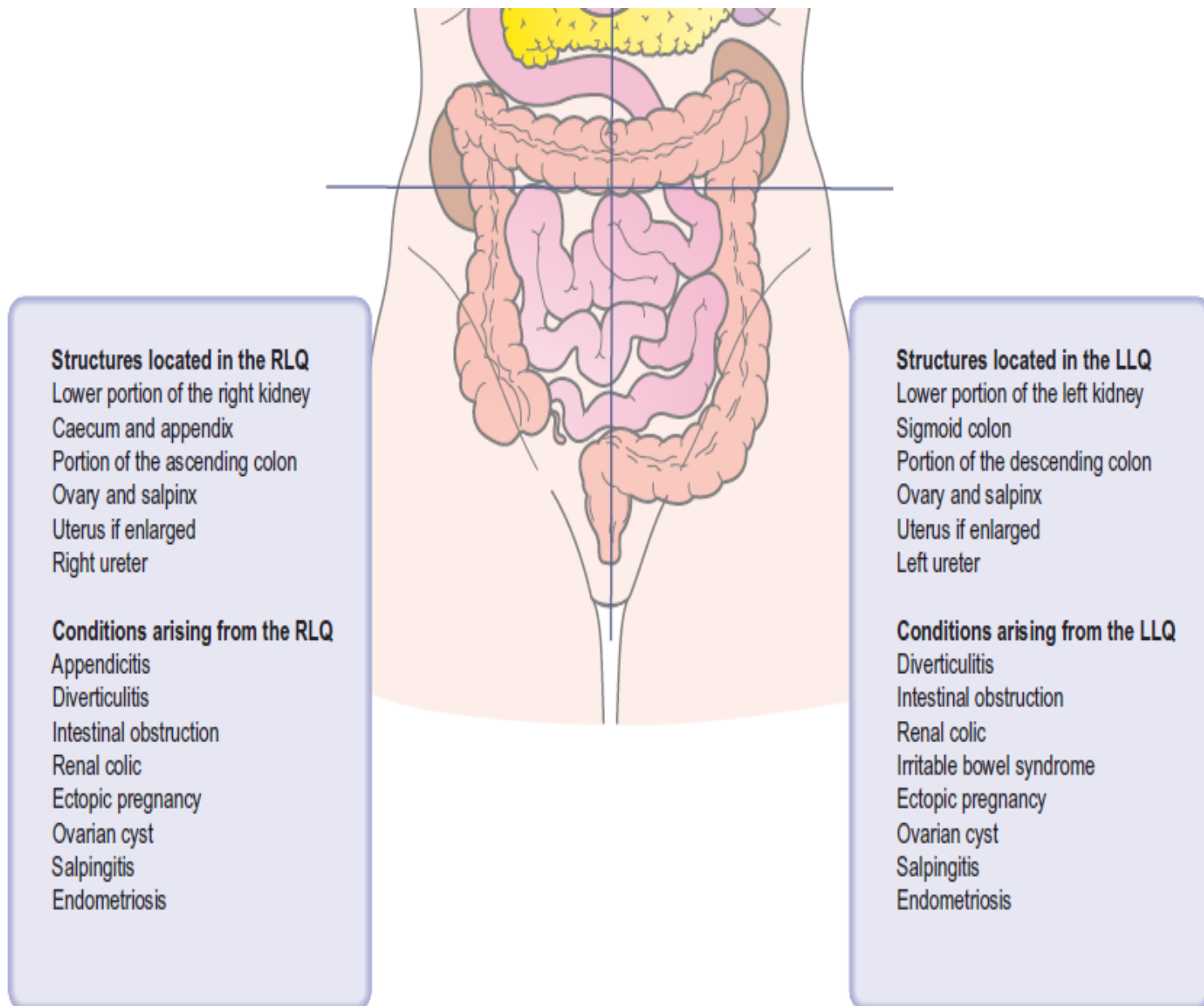


Fig. 6.15 Anatomical location of organs and conditions that can cause abdominal pain.

Presence only of abdominal pain/discomfort

- patients without other symptoms rarely have serious pathology.
- The symptoms are usually self-limiting and often no cause can be determined

Nature of the pain

- Heartburn is classically associated with a retrosternal burning sensation
- Cramp-like pain is seen in diverticulitis, IBS, salpingitis and gastroenteritis
- Colicky pain (pain that comes and goes) has been used to describe the pain of appendicitis, biliary and renal colic and intestinal obstruction
- Gnawing pain is associated with pancreatitis and pancreatic cancer
- boring pain with ulceration

Radiating pain Abdominal

- pain that moves from its original site should be viewed with caution
- Pain that radiates to the jaw, face and arm could be cardiovascular in origin
- Pain that moves from a central location to the right lower quadrant could suggest appendicitis
- Pain radiating to the back may suggest peptic ulcer or pancreatitis

Severity of pain

- Non-serious causes of abdominal pain generally do not give rise to severe pain.
- Pain associated with pancreatitis, biliary and renal colic and peritonitis tends to be severe
- (subjective scores higher than 6 out of 10)

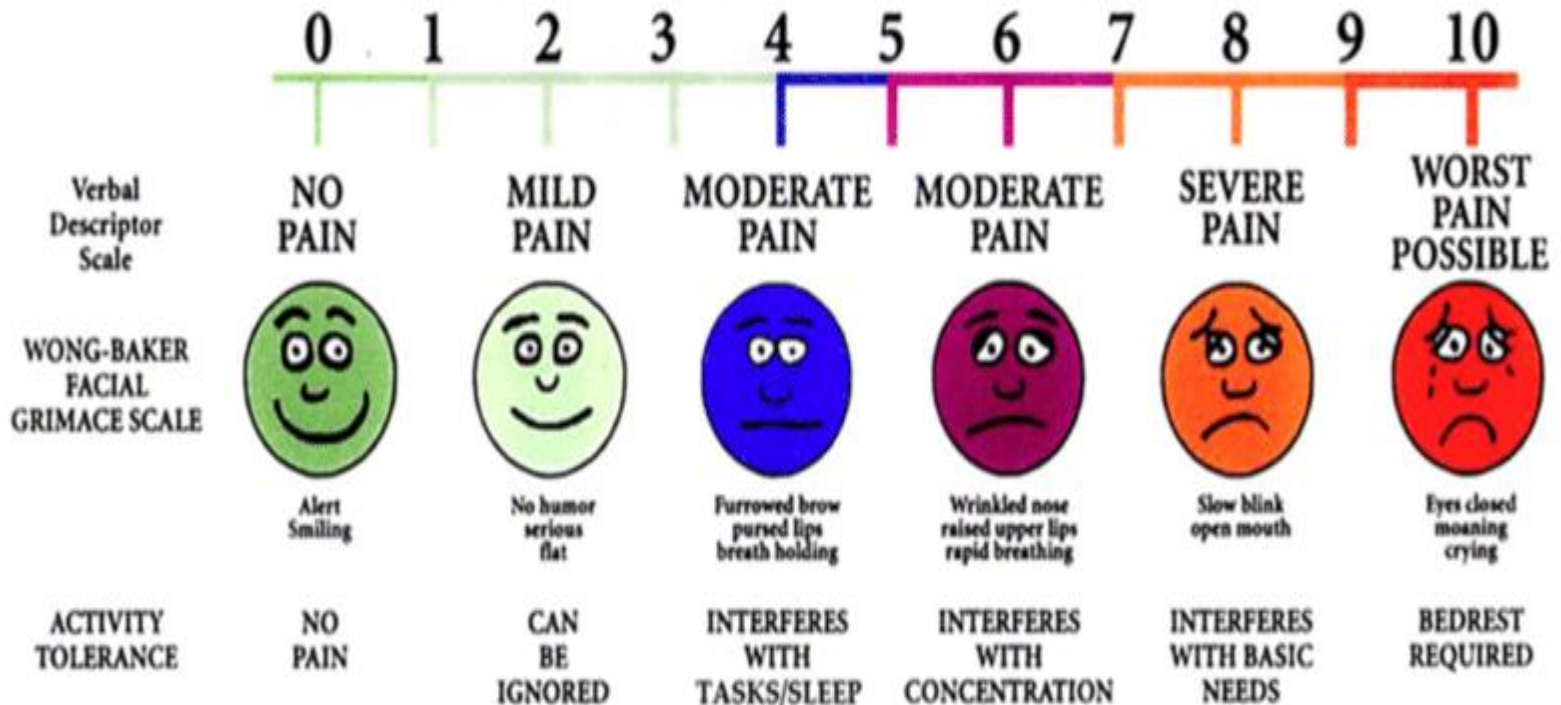
- Age of patient With increasing age, abdominal pain is more likely to have an identifiable and serious.
- Appendicitis is the only serious abdominal condition that is much more common in young patients.

Pain score scale

MODERATE

UNIVERSAL PAIN ASSESSMENT TOOL

This pain assessment tool is intended to help patient care providers assess pain according to individual patient needs. Explain and use 0-10 Scale for patient self-assessment. Use the faces or behavioral observations to interpret expressed pain when patient cannot communicate his/her pain intensity.



Onset & duration

- abdominal pain with sudden onset is generally a symptom of more serious conditions. For example, peritonitis, appendicitis, ectopic pregnancy, renal and biliary colic.
- Pain that lasts more than 6 hours is suggestive of underlying pathology

Aggravating factors

- Biliary colic can be aggravated by fatty foods.
- Vomiting tends to relieve pain in gastric ulcers
- Pain in duodenal ulcer is relieved after ingestion of food.
- Pain in salpingitis, pancreatitis and appendicitis are often made worse by movement.

Associated symptoms

- Vomiting, weight loss, melaena, altered bowel habit and haematemesis are all symptoms that suggest more serious pathology and require referral.

Causes of abdominal pain

Upper abdomen

- Most likely: Dyspepsia (L)
- Likely : Peptic ulcers
- Unlikely :Cholecystitis,(R)
renal colic ,cholelithiasis,
- Very unlikely: Splenic enlarg (L)
hepatitis, myocardial infarction

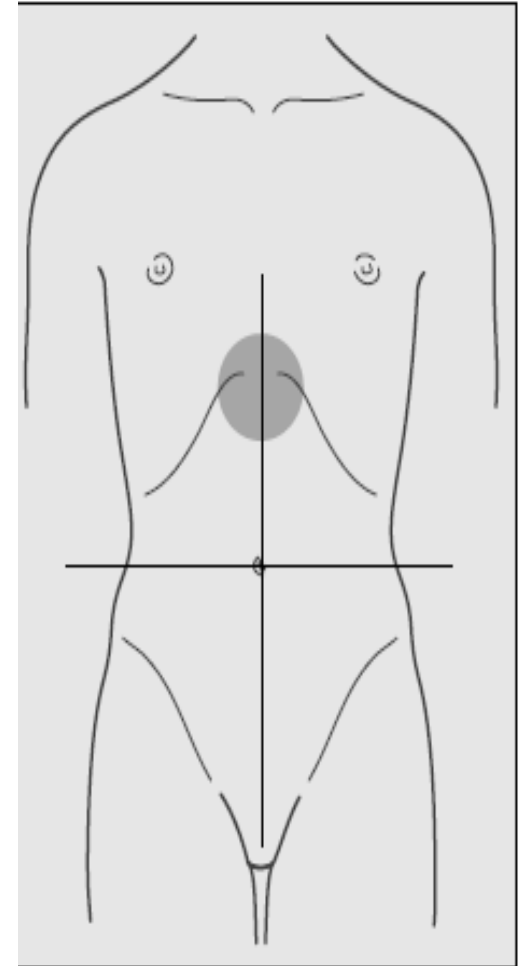
Lower abdomen

- Irritable bowel syndrome
- Diverticulitis (elderly)
- Appendicitis, Endometriosis
renal colic
- Ectopic pregnancy,
salpingitis, intestinal abs

1. Left upper quadrant pain

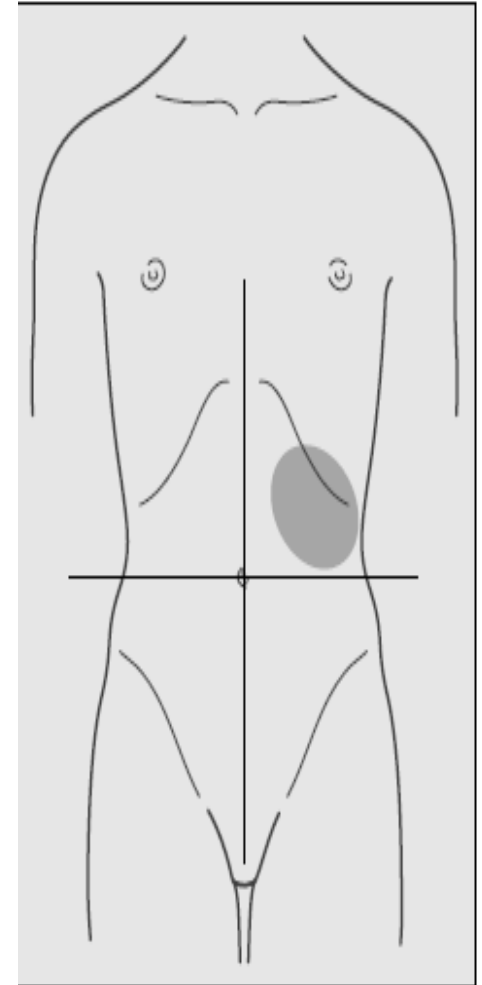
A. Dyspepsia/gastritis

- Patients with dyspepsia present with a range of symptoms that commonly involve vague abdominal discomfort (aching) above the umbilicus associated with bloating, flatulence, feeling of fullness and heartburn.
- It is normally relieved by antacids
- and aggravated by spicy foods or excessive caffeine. Vomiting is unusual.



B. Splenic enlargement or rupture

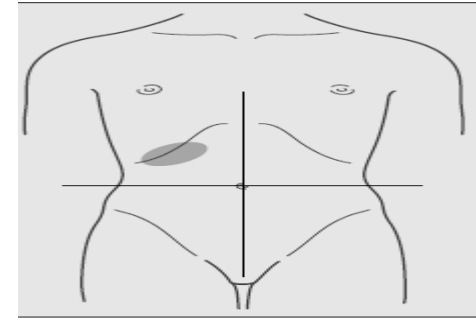
- If the spleen is enlarged, generalised left upper quadrant pain associated with abdominal fullness and early feeding satiety is observed .
- Referred pain to the left shoulder is sometimes seen.
- The condition is rare and is nearly always secondary to another primary cause, which might be an infection, a result of inflammation or haematological in origin.



2. Right upper quadrant pain

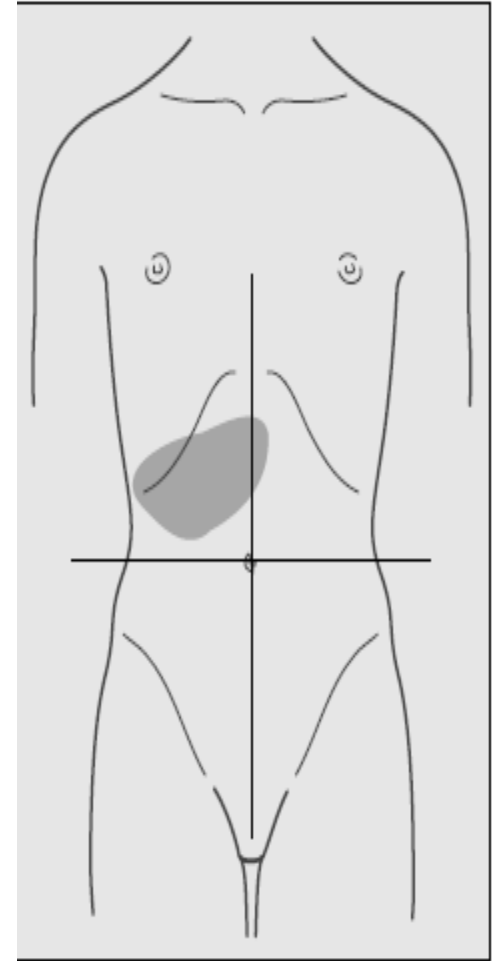
A. Acute cholecystitis and cholelithiasis

- Acute cholecystitis (inflammation of the gall bladder) and cholelithiasis (presence of gall stones in the bile ducts, also called biliary colic) are characterised by persistent, steady severe pain .
- Classically, the onset is sudden and starts a few hours after a meal and frequently waking the patient in the early hours of the morning.
- The pain can also be felt in the epigastric area and radiate to the tip of the right scapula in cholelithiasis.
- Fatty foods often aggravate the pain.
- The incidence increases with increasing age and is most common in people aged over 50. It is also more prevalent in women than men.



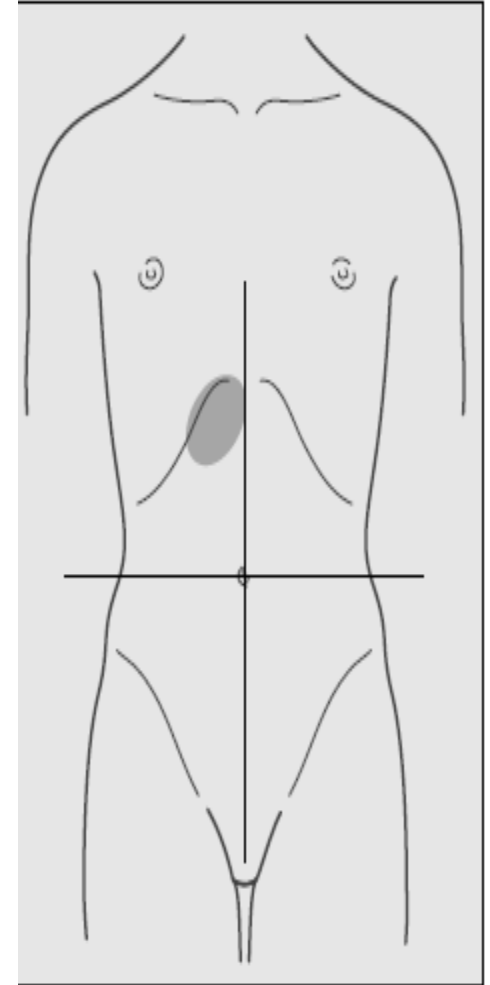
B. Hepatitis

- Liver enlargement from any type of hepatitis will cause discomfort or dull pain around the right rib cage .
- Associated early symptoms are general malaise, tiredness, skin rash and nausea.
- The most common causes of acute hepatitis are alcohol abuse and viral infection.



C. Ulcers

- Ulcers are classed as either gastric or duodenal.
- They occur most commonly in patients aged 30 to 50 years old and are more common in men than women.
- Symptoms are variable but typically the patient will have localised mid epigastric pain
- described as 'constant', 'annoying' or 'gnawing/boring'.

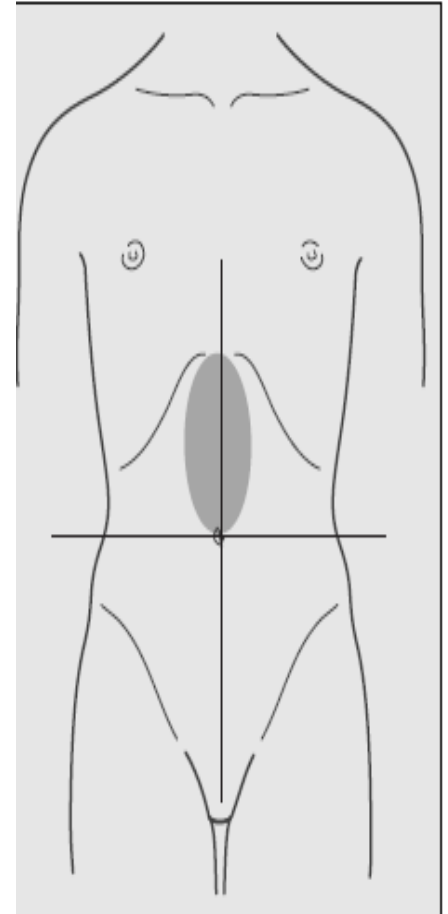


- With gastric ulcers, symptoms are inconsistent but the pain usually comes on whenever the stomach is empty – usually 15 to 30 minutes after eating – and is generally relieved by antacids or food and aggravated by alcohol and caffeine. NSAID use.
- is associated with a three- to fourfold increase in gastric ulcers.
- Duodenal ulcers tend to be more consistent in symptom presentation. Pain occurs 2 to 3 hours after eating and pain that wakes a person at night is highly suggestive of duodenal ulcer.

3. Pain affecting both right and left upper quadrants

A. Acute pancreatitis

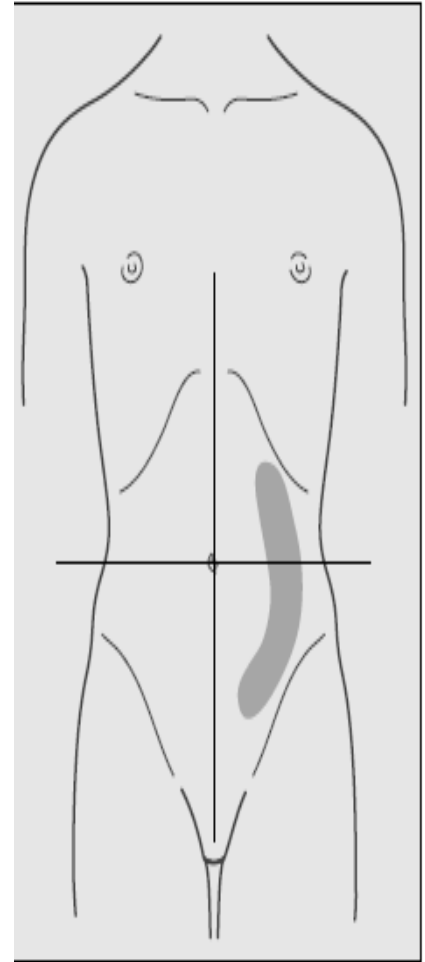
- Pain of pancreatitis develops suddenly and is described as agonising with the pain being centrally located that often radiates into the back .
- Pain reaches its maximum intensity within minutes and can last hours or days.
- Vomiting is common but does not relieve the pain.



- Early in attack patients might get relief from the pain by sitting forwards.
- It is commonly seen in alcoholics and it is likely that the patient will have a history of long-term heavy drinking.
- Patients are very unlikely to present in a community pharmacy due to the severity of the pain but a mild attack could present with steady epigastric pain sometimes centred close to the umbilicus and can be difficult to distinguish between other causes of upper quadrant pain.

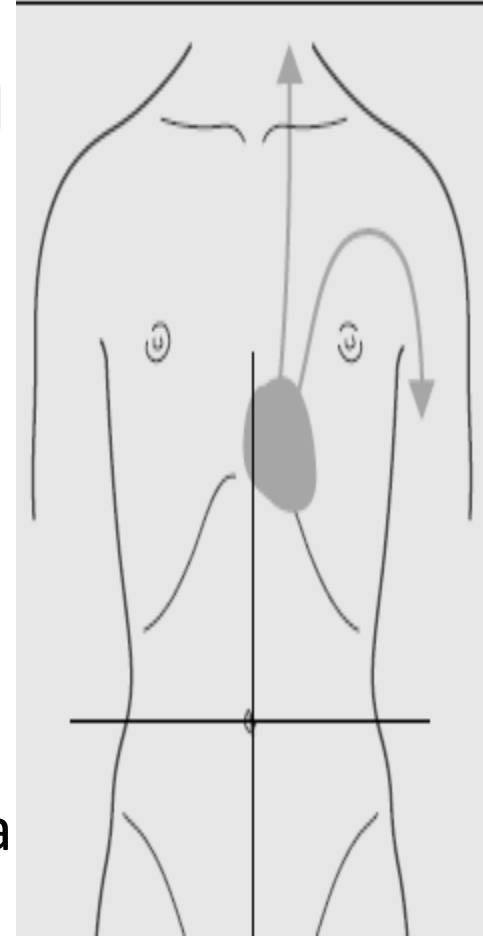
B. Renal colic

- Urinary calculi (stones) can occur anywhere in the urinary tract, although most frequently stones get lodged in the ureter.
- Pain begins in the loin, radiating round the flank into the groin and sometimes down the inner side of the thigh.
- Pain is severe and colicky in nature.
- Attacks are spasmodic and tend to last minutes to hours
- and often leave the person prostrate with pain.
- Symptoms of nausea and vomiting might also be present.
- It is more common in men and usually occurs between the ages of 30 and 50 years old.



C. Myocardial ischaemia

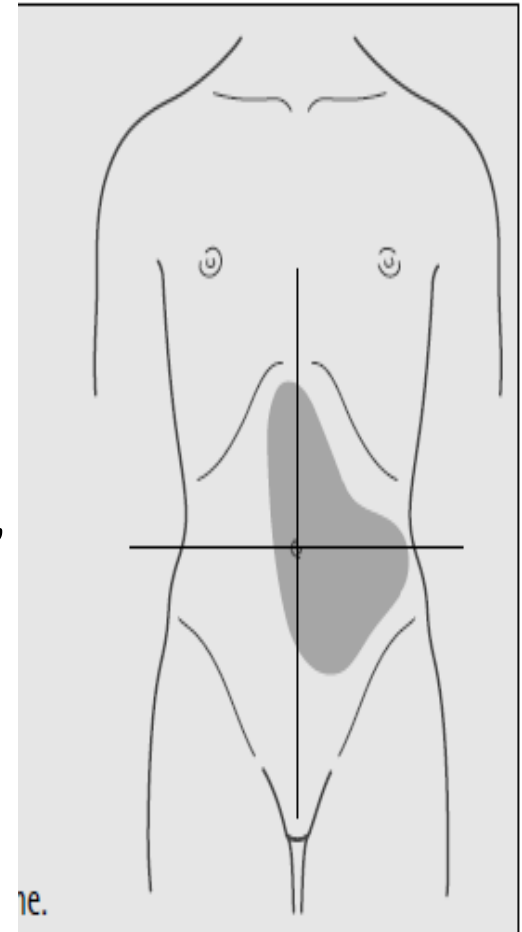
- Angina and myocardial infarction (MI) cause chest pain that can be difficult to distinguish initially from epigastric/retrosternal pain caused by dyspepsia .
- pain of cardiovascular origin often radiates to the neck, jaw and inner aspect of the left arm.
- Typically, angina pain is precipitated by exertion and subsides after a few minutes once at rest.
- Pain associated with MI will present with characteristic deep crushing pain.
- The patient will appear pale, display weakness and be tachycardic.
- Cardiovascular pain should respond to sublingual glyceryl trinitrate therapy.



4. Conditions affecting the lower abdomen

A. Irritable bowel syndrome

- Pain is most often observed in the left lower quadrant , however one-third of patients exhibit upper abdominal pain.
- The pain is described as ‘cramp-like’ and is recurrent.
- Alternating diarrhoea and constipation and mucus coating the stools is also often present

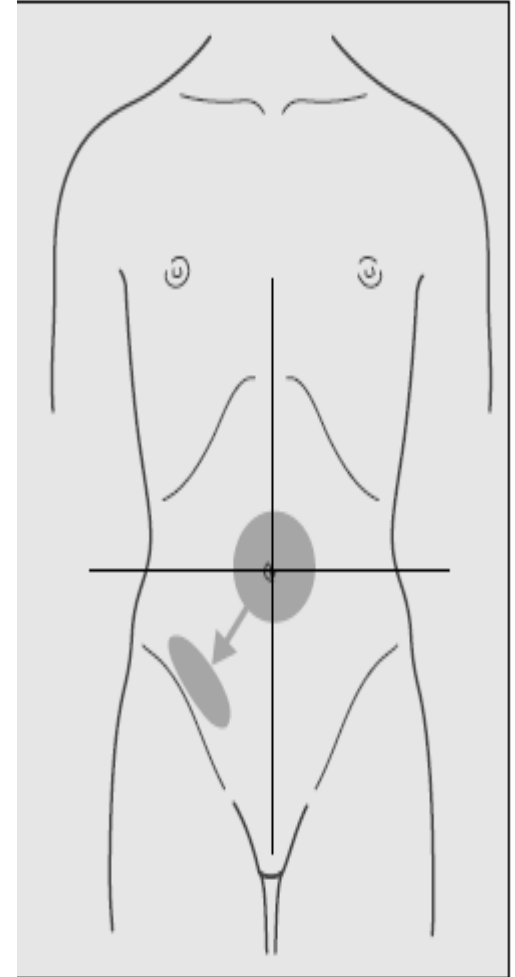


B. Intestinal obstruction

- Intestinal obstruction is most prevalent in people over the age of 50.
- It has sudden and acute onset.
- The pain is described as colicky and can be experienced anywhere in the lower abdomen. Constipation and vomiting are prominent features

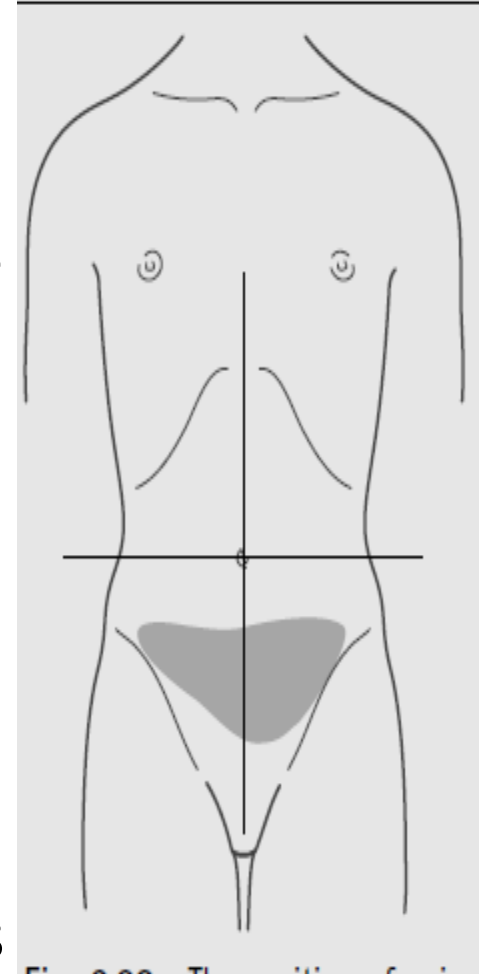
C. Appendicitis

- the pain starts in the mid-abdomen region, around the umbilicus, before migrating to the right lower quadrant after a few hours
- The pain of appendicitis is described as colicky or cramp-like but after a few hours becomes constant.
- Movement tends to aggravate the pain and vomiting might also be present.
- Appendicitis is most common in young adults, especially young men



Conditions affecting women

- Generalised lower abdominal pain can be experienced in a number of gynaecological conditions:
- Ectopic pregnancy: these are usually experienced between weeks 5 and 14 of the pregnancy.
- Patients suffer from persistent moderate to severe pain that is sudden in onset.
- Referred pain to the tip of the scapula is possible.
- Most patients (80%) experience bleeding ranging from spotting to the equivalent of a menstrual period. Diarrhoea and vomiting is often also present.



- Salpingitis (inflammation of the fallopian tubes): occurs predominantly in young, sexually active women, especially those fitted with an IUD (intrauterine device). Pain is usually bilateral, low and cramping.
- Pain starts shortly after menstruation and can worsen with movement.
- Malaise and fever are common.
- Endometriosis: patients experience lower abdominal aching pain that usually starts 5 to 7 days before menstruation begins and can be constant and severe.
- The pain often worsens at the onset of menstruation.
- Referred pain into the back and down the thighs is also possible.