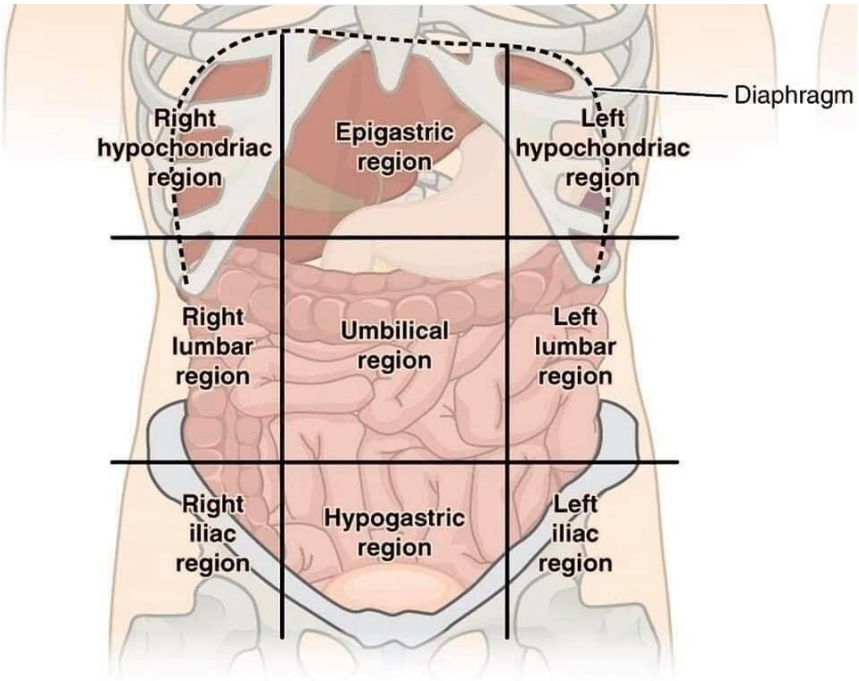
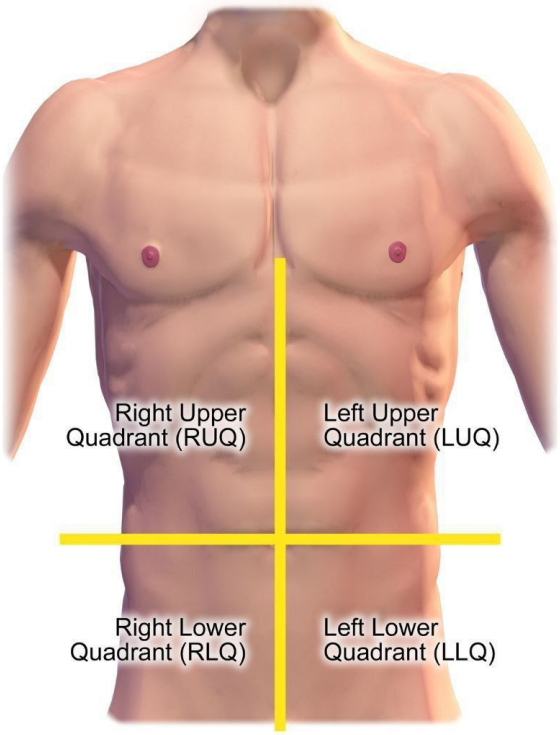
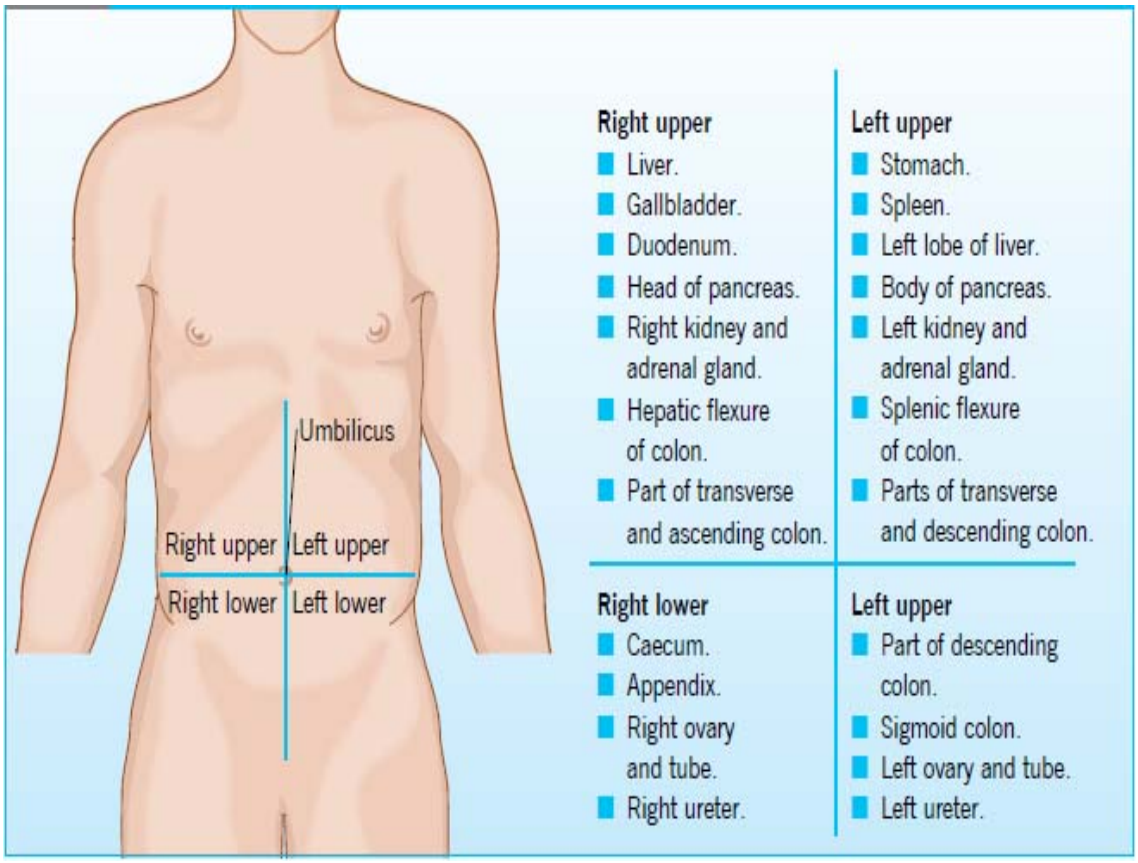
Abdominal assessment

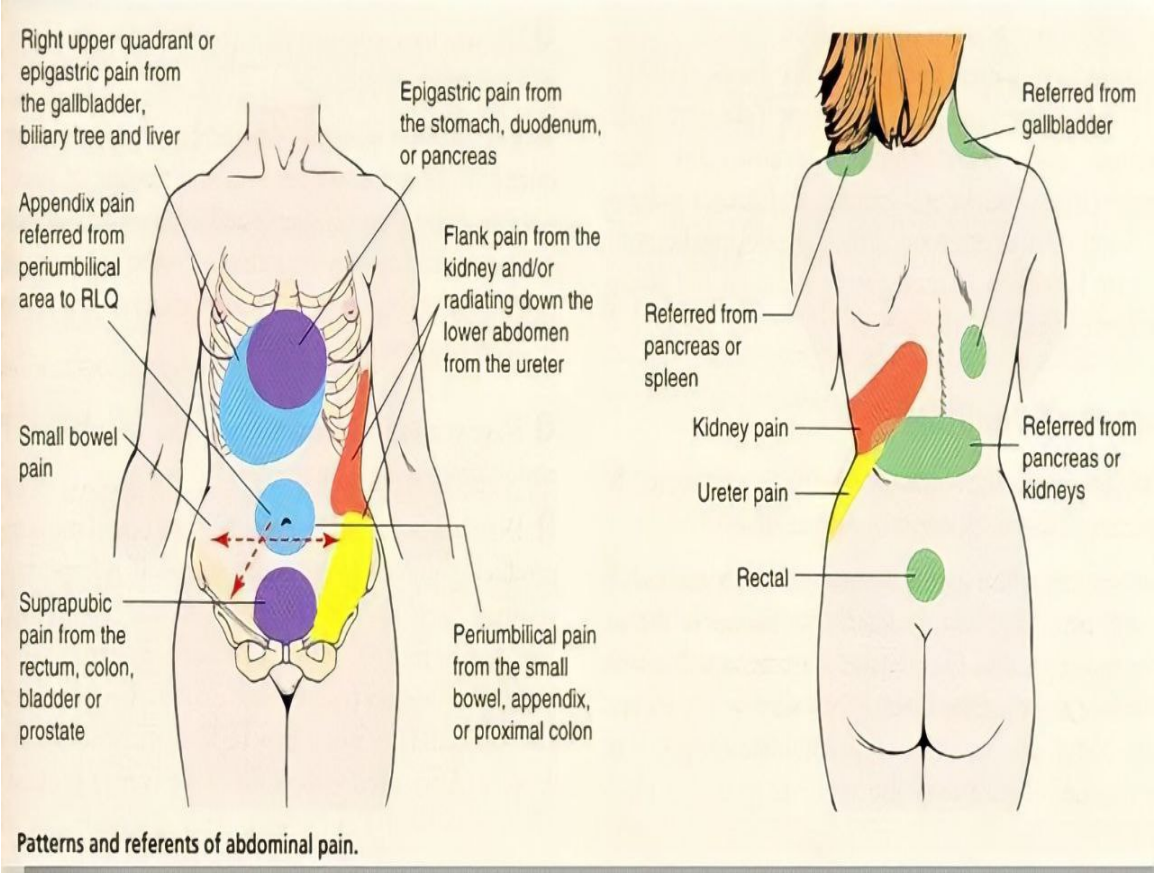


(a) Abdominopelvic regions



Abdominopelvic Quadrants





Abdominal pain may be formally described as visceral parietal or referred

Items	visceral pain	Parietal pain	Referred pain
Occurrence	Hollow abdominal organs such as intestines becomes distended or forcefully -The capsule of solid organs such as liver or spleen is stretched	The parietal peritoneum becomes inflamed as in appendicitis or peritonitis	Distant sites that are innervated at approximately the same levels as the disrupted abdominal organ
Location	Poorly defined or localized and intermittently timed	Tends to localized more to the source	Highly localized at the distant site
Character	Dull. aching, burning, cramping or colicky	More sever and steady pain	Travels or refers from the Primary site

Current symptoms	Are you experiencing abdominal pain	Abdominal pain occurs when specific digestive organs or structure are affected by chemical or mechanical factors as inflammation, infection distention obstruction or trauma
	How would you describe the pain? How bad is the pain severity on a scale of 1 to 10 ,with 10 being the worst	The quality or character of the pain may suggest its' origin. The client's perception of pain provides data on his or her response to and tolerance of pain. Sensitivity to pain varies greatly among individuals

	How does the pain begin?	The onset of pain is a diagnostic clue to its' origin .E.g. acute pancreatitis produces sudden onset of pain whereas the pain of pancreatic cancer may be gradual or recurrent
	Where is the pain located? Does it move or has it changed from the original location	Location helps determine the pain source and whether it is primary or secondary
	When does the pain occur (timing and relation to particular events such as eating, exercise, bedtime)	timing and relationship of particular events may be a clue to origin of pain (e.g. The pain of a duodenal ulcer may awaken the client at night)
	What are the precipitating factors (seems to bring on the pain) exacerbating factors (make it worse) or alleviating factors (make it better)	Various factors can precipitate or exacerbate abdominal pain such as alcohol ingestion with pancreatitis or supine position with gastro esophageal reflux disease
	Is the pain associated with any of the following symptoms nausea, vomiting ,diarrhea ,constipation, gas fever, weight loss, fatigue or yellowing of the eyes or skin	Associate signs and symptoms may provide diagnostic evidence to support or rule out a particular origin of pain. In epigastric pain accompanied by tarry stools suggests a gastric or duodenal ulcer
	Do you experiencing indigestion? Describe. Does anything in particular seem to cause or aggravated this condition	Indigestion(pyrosis) often described as heartburn may be an indication of acute or chronic gastric disorders including hyperacidity, GERD, peptic ulcer disease and stomach cancer
	Do you experiencing vomiting nausea? Describe. Is It triggered by any particular activities, events or other factors?	Nausea may reflect gastric dysfunction and may be associated with many digestive disorders and disease of the accessory organs such as liver and pancreas well as renal failure and drug intolerance
	Have you been vomiting? Describe the vomitus. Is it associated with any particular trigger factors?	Vomiting is associated with impaired gastric mobility or reflex mechanisms -Description of vomitus (emesis) is a clue to the source .E.g. bright hematemesis is seen with bleeding esophageal varicose and ulcers of the stomach or duodenum
	Have you noticed a change in your appetite	Loss of appetite (anorexia) is a general complain often associated with digestive disorders ,chronic syndromes, cancers and psychological disorders

Bowel Elimination	Do you have constipation? Describe. Do you have any accompanied symptoms?	Constipations is usually defined as a decrease in the frequency of bowel movement s or the passage of hard and possibly painful stools. Accompanies symptoms as bleeding with malignancy or pencil shaped stools with intestinal obstruction
Bowel Elimination	Have you experienced diarrhea? Describe .DO you have any accompanied symptoms?	Diarrhea is defined as frequency of bowel movements producing unformed or liquid stools. Bloody and mucous are associated with inflammatory bowel disease (e.g. ulcerative colitis) clay- color ,fatty stools may be from malabsorption syndrome
	Have you experienced any yellowing of your skin or white of your eyes ,itchy skin ,dark urine (yellow brown or tea colored) or clay colored	These symptoms should be evaluated to rule out possible liver disease
Past History	Have you ever had any of the following disorders, ulcers, gastroesophageal reflux, inflammatory or obstructive bowel disease, pancreatitis gallbladder or liver disease	Presenting the client with a list of the more common disorders may help the client identify any that he or she had
	Have you had any urinary tract disease as infection ,kidney disease or nephritis or kidney stones	urinary tract infection may become recurrent and chronic
	Have you ever had viral hepatitis	Various populations are at increased risk for exposure to hepatitis viruses. Any type of viral hepatitis may cause liver damage
	Have you ever had abdominal surgery or other trauma to the abdomen	Prior abdominal surgery or trauma may cause abdominal adhesions, thereby predisposing the client to future complications or disorders
Life Style and Health Practices	Do you drink? How much? How often	Alcohol ingestion can affect the gastrointestinal tract as the stomach, pancreas and liver. Alcohol —related disorders include gastritis, esophageal varicose
	What type of foods and how much food do you typically consume each day	A base line dietary and fluid survey helps determine nutritional and fluid adequacy and risk factor for altered nutrition, constipation and diarrhea
	How much and how often do you exercise	Regular exercise promotes peristalsis and the regular bowel movements

	If you have a gastrointestinal disorder how often does it affect your life style and how you feel about yourself?	Certain GIT disorders and their effects may produce psychological effects that affect the client's perception Of self-body image, social interaction and intimacy and life goals and exception
Inspect the skin		
Color	Abdominal skin may be pale than the general skin tone because the skin so seldom exposed to the natural elements	Purple discoloration of the flank indicates bleeding within the abdominal wall The yellow hue of jaundice may be more apparent on the abdomen
Vascularity	Scattered fine Vein may be visible	Dilated veins may be seen with cirrhosis of the liver, obstruction of the inferior vena cava. portal hypertension or as cites Dilated central arterioles with central star may be seen with liver disease or portal hypertension
Striae	Old ,silvery ,white striae or stretch marks from past pregnancies or weight gain are normal ascites	Dark blush —pink Striae are associated with Cushing's syndrome Striae may also be caused by ascites
Scars	Pale smooth minimally raised old scars may be seen	Non healing scars redness, inflammation. Deep irregular scars may result from burn
Lesion	Abdomen is free from lesions or rashes -Flat or raised moles may be present	Changes moles including size. color and border symmetry Bleeding moles or petechiae (reddish or purple spots)
Umbilicus Color	Umbilicus skin tones are similar to surrounding abdominal skin tone or even pinkish	Bluish or purple discoloration around the umbilicus (Cullen's' sign) indicate intra-abdominal bleeding
Location	Midline	A deviated umbilicus may cause pressure from a mass. Enlarged organs, hernia, fluid or scar tissue
Contour	Recessed inverted or protruding not more than 0.5 cm, round or conical	An everted umbilicus is seen with abdominal distension An enlarged everted umbilical suggests umbilical hernia
Inspect Contour, Symmetry, movement	Abdomen is flat ,rounded or scaphoid (usually seen in thin adults) Abdomen should be eventually rounded	A generalized protuberant or distended abdomen may be due to air (gas) or fluid accumulation. Distension below the umbilicus may be due to a full bladder, uterine enlargement or an ovarian tumor or cyst Distension upper the umbilicus may be seen with mass of the pancreas or gastric dilation (Refer to 7 F)

❖ Abdominal Distension (7 F's):

1. Full UB.
2. Fluid.
3. Fibroid.
4. Faces.
5. Foetus.
6. Flatus.
7. Fat.

	Abdomen is symmetric does not bulge when client raises head	A scaphoid (sunken abdomen) may be seen with severe weight loss or cachexia related to starvation or terminal illness
	Abdomen is symmetric does not bulge when client raises head	Asymmetry may be seen with organ enlargement, large masses, hernia or bowel obstruction A hernia (protrusion of the bowel through the abdominal wall) is seen as bulging in the abdominal wall
Observe aortic pulsation	A slight pulsation of the abdominal aorta visible in the epigastrium extends full length thin people	Vigorous wide exaggerated pulsation may be seen with abdominal aortic aneurysm
Watch for peristaltic waves	peristaltic waves are not seen except in thin people as slight ripples on the abdominal	peristaltic waves arc increased and progress in a ripple —like fashion from LUQ to RLQ with intestinal obstruction especially small intestine
	Auscultation for Bowel Sounds	
Note the intensity pitch and frequency of sounds	A serious of intermittent ,soft clicks and gurgle are heard at a rate of 5-30 per minute Borborygmi hyperactive sounds may be normally heard as loud prolonged gurgles characteristics of stomach growling	Hypoactive bowel sounds indicate diminished bowel motility caused by abdominal surgery or late bowel obstruction Hyperactive bowel sounds indicate increased bowel motility caused by diarrhea, gastroenteritis or early bowel obstruction Decreased or absent bowel sounds signify the absence of bowel motility associated with peritonitis or paralytic illus requiring immediate referral

	Auscultation for Vascular Sounds and Fraction Rubs	
Listen for Bruit use the bell Listen over the abdominal aorta, renal, iliac and femoral arteries	Bruit (low pitched ,murmur like sound) are not normally heard over the abdominal aorta renal, iliac and femoral arteries	Bruit occurs when blood flow in an artery is turbulent or obstructed. This indicate aneurysm or arterial stenosis
Listen for a venous hum in the epigastric and umbilical areas. Use the bell	Venous hum is not normally heard over the epigastria and umbilical areas	Venous hum are rare However an accentuated Venous hum heard in the epigastria and umbilical areas suggested increased collateral circulation between the portal and systemic venous system as in cirrhosis of the liver
Listen for a friction rub over the liver and spleen on the RT and LT lower rib cage with the diaphragm	No friction rub over the liver or spleen	friction rub are rare -If heard ,they have a high pitch, rough, grating sound produced when the large surface area over the liver or spleen runs the peritoneum
Per cuss for tone Lightly and systematically over the percuss all quadrant	Generalized tympany predominates over abdomen Dullness over the liver and spleen and over a non-evacuated distended colon	Accentuated tympanic or hyper resonance is heard over a gaseous distended abdomen An enlarged area of dullness is heard over distended bladder, large masses or ascites
Percuss the liver Percuss the span or height of the liver by the determining its' lower and upper border	Lower border of the liver dullness is located at the coastal margin to 1 to 2 cm below	The Lower border of the liver dullness May be difficult to estimate when obscured by intestinal gas The upper border of the liver dullness May be difficult to estimate when obscured by Pleural fluid or lung consolidation Hepatomegaly a liver span that exceeds normal limits (enlarged) is characteristics of liver tumors Cirrhosis, abscess and vascular enlargement Atrophy of the liver is indicated by a decreased span

	On deep inspiration ,Lower border of the liver dullness may descent from 1-4 cm below the costal margin The upper border of the liver dullness is located between the left 5th and 7th ICS	
	The normal liver span at the MCL is 6 to 12 cm (greater in men and taller clients, less in shorter client he normal liver span at the MSL is 4 to 8 cm	
Per cuss the spleen begin posterior to left mid maxillary line (MAL) and per cuss downward	The spleen is an oval area of dullness about 7 cm Wide near the left tenth rib and slightly posterior to the MAL	Results of splenic percussion may be obscured by air in the stomach or bowel Splenomegaly is characterized by an area of dullness greater than 7 cm wide The enlargement may result from traumatic injury and portal hypertension Other sources of dullness e.g. full stomach or faces in the colon must be ruled out before confirming splenomegaly
	Perform Blunt Percussion on the liver and kidneys	
To assess for tenderness in difficult to palpate structure	No tenderness or pain is reported by the client The examiner senses only a dull thud	Tenderness over the liver may be associated with inflammation or infection e.g. hepatitis or cholecystitis Tenderness or sharp pain over costo-vertebral suggests kidney infection (pyelonephritis) renal calculi or hydronephrosis
Palpate the umbilicus	Umbilicus and surrounding area are free of swelling, bulges, masses	A soft center of the umbilicus can be potential for herniation
Palpate the Aorta Use thumb and first finger and palpate deeply in the epigastria slightly to the lift of midline	The normal aorta is approximately 2.5 to 3.0 cm wide with a moderate strong and regular pulse Possibly mild tenderness may be elicited	A wide bounding pulse may be felt with an abdominal aortic aneurysm

Palpate the liver Bimanually or by hooking	The liver is usually not palpable ,although it may be felt in some thin clients -The lower edge should be firm and smooth Mild tenderness may be normal	A hard firm liver may indicate cancer No duality may occur with tumors, cancer and late liver cirrhosis Tenderness may be from vascular engorgement e.g. CHF, acute hepatitis Liver more than 1 to 3 cm below the costal margin is considered enlarged
Palpate the spleen	The spleen is seldom palpable at the left costal margin ,rarely the tip is palpable in the presence of a low flat diaphragm e.g. COPD	Palpable spleen suggests enlargement tip to three times the normal size which may result from trauma, chronic blood disorders
Palpate the kidney	The kidney are normally not palpable	An enlarged kidney may be due to a cyst, tumor or hydronephrosis
Palpate the urinary bladder	Normally no palpable	A distended bladder is palpated as a smooth, round and somewhat firm mass, extending as far as the umbilicus. It may be further validated by dull percussion tone
	Special Abdominal Tests 1-Ascites	
Test for shifting Dullness For the client has ascites. First in supine position. Then turn client onto his side	The border between tympany and dullness remain relatively constant throughout position change	The fluid assumes dependent position and produces a dull percussion tone around the flank in supine position and tympany around the umbilical .On side position ,tympany is on the top
	2-Appendicitis	
Rebound Tenderness Assess abdominal pain and tenderness Palpate the area of pain and suddenly release pressure	No rebound Tenderness	The client has rebound tenderness when perceiving sharp stabbing pain as the examiner release pressure from the abdomen (Blumberg's sign).
Rovsing's Sign Palpate deeply in LLQ	No pain	Pain in the RLQ during pressure in the LLQ is a positive Rovsing's sign
Psoas Sign	No abdominal pain	Pain in the RLQ indicates irritation of the iliopsoas muscle due to inflamed appendix
Obturator Sign	No abdominal pain	Pain in the RLQ associated with irritation of the Obturator muscle due to inflamed appendix

	3- Cholecystitis	
Murphy's sign To assess RUQ pain or tenderness Press finger tips under the liver border at the right costal margin While the client inhaling deeply	No increase in pain	Accentuated sharp pain that causes the client to hold his breath (inspiratory arrest) is associated with acute cholecystitis is a positive Murphy's Sign