GI Physical examination

		Comments on if normal:
Introduction	1- Introduce yourself 2- Take permission and explain to the patient 3- Ensure privacy 4- Ensure illumination (good light) 5- Ensure good room temperature 6- Good hand hygiene 7- Have a chaperone 8- Ask if the patient is in pain	
Position and Exposure	1- Position: supine position 15 degree (Arms by his side & Head resting on 1-2 pillows to relax abdominal wall muscles). 2- Exposure: from the xiphisternum to the symphysis pubis	
General (first impression)	1- CAO: consciousness, alertness and orientation 2- Mental status/in pain/cachectic/thin/obese (truncal, generalized, striae)/ gynecomastia (men)/breast atrophy (women) 3- Jaundice or skin pigmentation. 4- Odor: fetor hepaticus, alcohol, uremia, ketones 5- Late neurological features: spasticity, extension of the arms and legs	The patient is conscious, alert and oriented to time, place and person. No…
Vitals	1- Pulse, BP, RR, Temp, O2 sat, BMI (pulse and BP examined with the arterial pulses later)	Normal vitals
Face	1- Scleral jaundice 2- Conjunctival pallor 3- Parotid swelling (sialadenosis) 4- Spider nevi (>5 in distribution of SVC, seen in chronic liver disease) 5- Mouth, throat and tongue for: ✓ Carries ✓ Angular cheilitis (painful/IDA) ✓ Atrophic glossitis (pale, smooth tongue/IDA) ✓ Aphthous ulcers; celiac and IBD ✓ Beefy, raw tongue (folate and vit B12 def) 6- Smell: Fetor hepaticus, alcohol, uremia, ketones 7- Rash in inflammatory connective diseases	No scleral jaundice, conjunctival pallor, parotid swelling, …
Hands	1- Nails: ✓ Clubbing (liver cirrhosis, IBD) ✓ Koilonychia (spoon shaped) ✓ Leukonychia (liver disease, celiac, nephrotic) ✓ Lindsay's nails (half and half in CKD)	No nail changes like…, no palmar erythema, no…

	2- Palmar erythema (liver disease, pregnancy) 3- Spider nevi (liver disease, normal in pregnancy) 4- Dupuytren's contracture (alcoholic liver disease) 5- Flapping tremor (hepatic encephalopathy) 6- Needle marks (IV drug users) 7- Tar stain 8- Muscle wasting 9- Temperature 10- Av fistula on the arm for dialysis	
Lymph nodes	1- **Left supraclavicular LN (Virchow node):** if palpable>positive Troisier's sign in gastric and pancreatic CA 2- Examine axillary, cervical and inguinal LN	Comment if any LN were palpable and describe it.
Anterior chest	Examine chest for signs of chronic liver disease: 1- Gynecomastia in men 2- Breast atrophy in women 3- Spider nevi 4- Scratch marks (Generalized itching) 5- Hair distribution	No…
Abdominal Exam		
Inspection	✓ Exposure from the xiphisternum to the symphysis pubis and pt in supine position 15 degree. **From foot of the bed** 1- Symmetry 2- Breathing pattern (thoracoabdominal) 3- Contour & shape of the abdomen (flat, scaphoid) 4- Umbilicus (location, inverted or everted) **From rt side of the bed** 1- Scars (Mercedes benz, kocher, midline,…) 2- Striae (pregnancy) 3- Scratch marks 4- Stoma 5- Skin lesions (hemangiomas, seborrheic warts) 6- Visible veins (caput medusa in portal HTN) 7- Visible pulsation 8- Visible peristalsis 9- Visible masses 10- Bruises (Cullens and Grey turner in retroperitoneal bleeding i.e. hemorrhagic pancreatitis). 11- Hair distribution 12- **Cough impulse:** ask pt to cough and look for umbilical or inguinal hernias, and dunphy's sign (sharp pain in RLQ when a patient is asked to cough; in acute appendicitis) 13- **Divarication of recti:** ask pt to tilt his head	From foot of the bed: the abdomen is symmetrical, flat shape and thoracoabdominal movement with respiration. Umbilicus is inverted and centrally located. From RT side: No…, No visible cough impulse and intact hernial orifices.

Palpation	**Preparation** 1- Obtain permission 2- Check for pain 3- Warm your hands 4- Maintain eye to eye contact (important) **Palpate** (ask for chair or kneel) 1- Superficial palpation (all 9 regions, horizontally) 2- Deep palpation (same superficial but deeper) 3- Specific signs (only mention it, except murphy) ❖ <u>Rebound tenderness</u>: pain when pressure on abdomen is suddenly released (peritonitis) ❖ <u>Rovsing's</u>: palpation in LIF produces pain in RIF (acute appendicitis) ❖ <u>Iliopsoas</u>: painful response when asking the pt to flex their thigh against the resistance of your hand. Also, painful response when you extend the hip and knee (inflamed retrocecal appendix) ❖ <u>Obturator sign</u>: painful response when you flex the knee and internal rotation of the thigh (inflamed pelvic appendix) ❖ **Murphy's sign:** As the patient takes a deep breath in, gently palpate in the right upper quadrant of the abdomen, evoking pain with the arrest of inspiration (acute cholecystitis).	Superficial palpation ✓ No superficial masses or tenderness ✓ Soft lax abdomen (no guarding, no rigidity) ✓ Sister Mary Joseph's nodules; hard umbilical nodules in metastatic cancer Deep palpation ✓ No deep masses, no deep tenderness ✓ If there is a mass; comment on SPACESPIT (ask pt to tense their abdominal muscles by lifting their head. abdominal wall mass will still be palpable, intraabdominal mass will not)
Percussion	✓ Percuss over the 9 regions of the abdomen (over mass of fluids gives dull sound)	Comment: normal tympanic percussion all over the abdomen
Special organ tests	**<u>Liver</u>** Palpation: ✓ Place the edge of your hand flat on RIF ✓ Ask the pt to take deep breath by the mouth ✓ Move your hand up the abdomen, 1cm at a time, between each breath the patient takes until you reach the costal margin or detect the liver edge. ✓ If the liver edge is palpable, describe SPACESPIT. ✓ Murphy's sign Percussion: ✓ liver span: ask the pt to hold their breath in full expiration, percuss downwards from the RT 2nd ICS to 5th ICS in the mid-clavicular line, listening for dullness indicating the upper border of the liver. ✓ Measure the distance from the upper border of dullness to the palpable liver edge (normally 8-12 cm) ✓ If the liver edge is not palpable then percuss starting from the RIF upwards until it becomes dullness	Special organ palpation ✓ Liver edge if palpable or not, liver span is normal (8-12cm), no tenderness and no murphy's sign. ✓ Spleen is not palpable, no splenomegaly, no tenderness. The spleen is dull to percussion. ✓ Kidney is not palpable, no costovertebral angel tenderness. ✓ Suprapubic dullness (for bladder)

	<u>Spleen</u> Palpation: ✓ Ask the patient to take a deep breath, start from RIF and move diagonally upwards towards left hypochondrium and feel the costal margin along its length; 1 cm at a time between each breath. ✓ If you cannot feel the splenic edge, ask the pt to roll towards you and on his right side and repeat the above. Palpate with your right hand, placing your left hand behind the pt's left lower ribs, pulling the ribcage forward. Percussion ✓ percuss over the lateral chest wall posterior to the left midaxillary line beneath (9th, 10th, 11th ribs) **<u>Kidneys</u>** ✓ <u>Bimanual exam</u>; place your right hand above and the left hand below (do it just like the regular palpation). Ask the pt to take a deep breath and push up by flexing the fingers of your left hand. Do the same on the other side. ✓ <u>Balloting technique</u>; place your left hand under the pt's back, with your index against the 12th rib, the right pushes firmly down on anterior abdominal wall. ✓ Palpate <u>the renal angel</u>; ask the pt to sit up, with a closed fist from the ulnar side, strike gently on both sides once. Note any discomfort or pain **<u>Bladder</u>** ✓ Percuss over a resonant area in the upper midline area of the abdomen and then down towards the symphysis pubis. A change to a dull percussion indicates the upper border of the bladder. **<u>Ascites Tests:</u>** 1- <u>Shifting dullness</u> (for minor to moderate ascites) ✓ Percuss from the midline (tympanic area) laterally to the flank (dull area). ✓ Keep your finger on the site of dullness in the flank and ask the pt to turn on to their opposite side. ✓ Wait for 10 seconds then percuss again. If the area of dullness is now resonant, shifting dullness is present. 2- <u>Fluid thrill</u> (for massive ascites) ✓ Place pt hand on the midline of the abdomen ✓ Place the palm of your left hand flat against the left side of the pt's abdomen and flick a finger of your right hand against the right side of the abdomen. If you feel a ripple against your left hand, a fluid thrill is present.	✓ Negative shifting dullness, no transmitted thrills.

Auscultation	Auscultate the following areas using the diaphragm 1- Bowel sounds: RIF (ileocecal valve), up to 2 mins 2- Aorta bruits: above the umbilicus 3- Renal artery bruits (stenosis): 2-3 cm above and lateral to the umbilicus, both sides 4- Liver bruits and friction rubs: over the liver 5- Spleen friction rubs: Lt lower costal area 6- Succussion splash (only mention it) Finish with examining the following: 1- Inguinal lymph nodes for hernia 2- Femoral artery stenosis bruits 3- Genitalia in males for testicular atrophy 4- Per rectal exam 5- Back for sacral edema 6- Lower limb for edema, hair loss, pyoderma gangrenosum 7- Chest exam for pulmonary edema 8- Heart sounds 9- JVP	Normal gurgling bowel sounds every 5-10 seconds, no bruits, no friction rub.

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