Gastrointestinal System Assessment

A physical assessment of the GI system should include a thorough examination of the mouth, jaw, teeth, gums, oral mucosa and tongue. Palpate the gums, inner lips and cheeks for tenderness, lumps, and lesions. Begin to assess the abdomen by dividing the abdomen into four quadrants, and then imagining the organs in each quadrant. The sequence should be to inspect, auscultate, percuss and then palpate, from light palpation to deep palpation. Auscultation is always first, as palpating or percussing the abdomen before auscultation can change the character of the patient's bowel sounds and lead to an inaccurate assessment. Begin the rectum and anus exam by inspecting the perianal area, and then palpating the rectum with a gloved index finger.

PLAY PICMONIC

Mouth

Inspect Mouth, Jaw, Teeth, Gums and Oral Mucosa

Inspect Mouth, Jaw, Teeth, Gums, Oralmucosa

Inspect the mouth and jaw for color, asymmetry and swelling. Check the bite, noting if there is an underbite or overbite. With a penlight, examine the inner and outer lips, teeth, gums and oral mucosa. Note any bleeding or ulcerations, tooth status, and tenderness, lumps and lesions.

Inspect Tongue

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Assess the tongue, checking for coating, tremors, swelling and ulcerations. Note unusual breath odors. In addition, check the pharynx by using a tongue depressor pressed firmly on the middle of the tongue, asking the patient to say, "Ahh." Assess for color changes, uvular deviation, lesions, plaques and tonsillar abnormalities.

Palpate Areas for Tenderness/Lesions

Paw Areas for Tenderizer and Leeches

Palpate the gums, inner lips and cheeks for tenderness, lumps, and lesions.

ABDOMEN

Inspect Abdominal Quadrants

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The healthcare provider will begin by imagining the abdomen is divided into four quadrants, and then imagining the organs in each quadrant. These will be divided into right upper quadrant, left upper quadrant, right lower quadrant and left lower quadrant. Assess the umbilicus, which should be inverted. Conditions such as pregnancy, ascites or an underlying mass can cause the umbilicus to protrude. The abdomen skin should be smooth and uniform in color. Note stretch marks and dilated veins, or surgical scars.

Auscultate

Stethoscope

Lightly place the stethoscope diaphragm in the right lower quadrant, slightly below and to the right of the umbilicus. From there, auscultate in a clockwise direction to each of the four quadrants.Note the quality of the bowel sounds in each quadrant. Sometimes, you may need to auscultate for up to five minutes before you hear a noise, so allow time to listen before you decide there are absent or abnormal bowel sounds. Note if the bowel sounds are normal, hypoactive or hyperactive. Auscultate for vascular sounds with the bell of the stethoscope. Listen over the aorta and renal, iliac and femoral arteries for bruits, hums and friction rubs.

Percuss

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Direct or indirect percussion is used to detect size and location of abdominal organs and to detect air or fluid in the abdomen, stomach or bowel. For direct percussion, strike the hand or finger directly against the patient's abdomen. With indirect percussion, use the middle finger of the dominant hand or a percussion hammer to strike a finger resting on the patient's abdomen. Don't percuss the abdomen if there is an abdominal aortic aneurysm or transplanted abdominal organ. When you percuss over hollow organs (empty stomach or bowel) you should hear tympany, because air is normally present in the stomach

and bowel. When you percuss over solid organs (the liver, kidney, or full intestines), the sound changes to dullness. Percuss around the liver to help estimate its size. Hepatomegaly is commonly associated with hepatitis and other liver diseases. The spleen is located at the level of the 10th rib, in the left midaxillary line. Percussion may produce a small area of dullness or less in adults. However, the spleen usually can't be percussed because tympany from the colon masks the dullness of the spleen. To differentiate between spleen and kidney enlargement, the patient should take a deep breath. Then percuss along the 9th to 11th intercostal spaces on the left midaxillary line. Tympany should be heard. If dullness is heard instead, the patient's spleen may be enlarged. If resonance is heart, the left kidney may be enlarged.

Palpate

Paw

Palpation includes light and deep touch to help determine size, shape, position and tenderness of major organs and to detect masses and fluid accumulation. Palpate all four quadrants, leaving painful and tender areas for last.

Light Palpation

Light Paw

Light palpation helps identify muscle resistance and tenderness as well as the location of some superficial organs. To palpate, put the fingers of one hand close together, depress the skin about a ½ inch with fingertips, and make gentle, rotating movements, avoiding short, quick jabs. The abdomen should be soft and nontender. While palpating the four quadrants, notice masses and areas of tenderness or increased resistance. Determine whether the resistance is from the patient being cold, tense or ticklish, or if it's actually due to involuntary guarding or rigidity from muscle spasm or peritoneal inflammation.

Deep Palpation

Deep-diver Paw

To perform a deep palpation, push the abdomen down 2" to 3". In an obese patient, put one had on top of the other and push. Palpate the entire abdomen in a clockwise direction, checking for tenderness, pulsations, organ enlargement and masses. If the patient's abdomen is rigid, don't palpate it, as it could be peritoneal inflammation and palpation could cause pain or rupture an inflamed organ. Although a normal spleen isn't palpable, an enlarged spleen is.

Check for Rebound Tenderness and Ascites

Check for Rebounding Tenderizer and Ascites Iced-tea

If peritoneal inflammation is suspected, rebound tenderness should be checked at the end of the exam. Choose a site away from any painful area, position your hand at a 90-degree angle to the abdomen. Push slowly down and deeply into the abdomen, then withdraw the hand quickly. Rapid withdrawal causes the underlying structures to rebound suddenly and results in a sharp, stabbing pain on the inflamed side. Don't repeat this process as you may rupture an inflamed appendix. To check for ascites, have another healthcare worker place the ulnar edge of their hand firmly on the patient's abdomen at its midline. As you stand facing the patient's head, place the palm of your right hand against the patient's left flank. Give the abdomen a firm tap with your left hand. If ascites is present, you may see and feel a "fluid wave" ripple across the abdomen.

Rectum and Anus

Inspect Perianal Area

Inspect Pear-with-hole Area

If you patient is 40 or older, perform a rectal examination as part of the assessment. Put on gloves and spread the buttocks to expose the anus and check for fissures, lesions, scars, inflammation, discharge, rectal prolapse and external hemorrhoids. Ask the patient to strain as if he's having a bowel movement, this may reveal internal hemorrhoids, polyps or fissures. The skin in the perianal area is normally darker than that of the surrounding area.

Palpate Rectum with Gloved Index Finger

Paw Rectum-rectangle with Gloved Index Finger

Apply a water-soluble lubricant to gloved index finger and tell the patient to relax, warning them that they might feel pressure. Ask the patient to bear down. As the sphincter opens, insert your finger into the rectum, toward the umbilicus. Rotate your finger clockwise and counterclockwise to palpate as much of the rectal wall as possible. The rectal walls should feel soft and smooth, without masses, fecal implantation or tenderness. Remove your finger from the rectum and inspect the glove for blood, stool, and mucus.