



Telehealth Gastroenterology Presenting

1. SCOPE

- 1.1. Marshfield Clinic System Wide Telehealth Presenters

2. DEFINITIONS & EXPLANATIONS OF TERMS

- 2.1. Pallor: Paleness
- 2.2. Sclera Icterus: Yellowing of the sclera
- 2.3. PERRLA: Pupils equal, round & reactive to light & accommodation
- 2.4. Hepatomegaly: Enlargement of liver
- 2.5. Splenomegaly: Enlargement of spleen
- 2.6. Rectus Muscle:

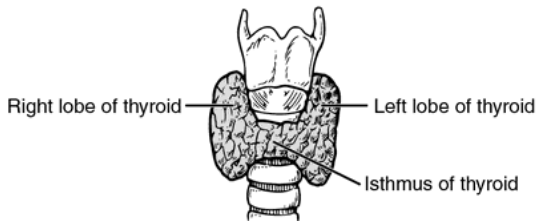


- 2.7. Costal Margin: Lower (abdominal) border of the front of the rib cage formed by the costal cartilages of ribs 7 to 10
- 2.8. Clubbing: Ends of the fingers and toes are enlarged and the nails are shiny and abnormally curved

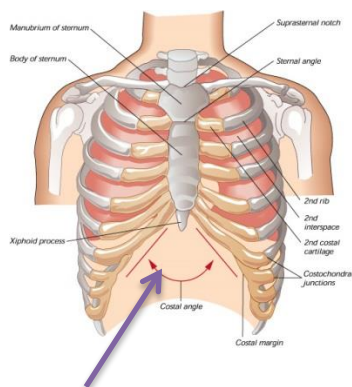


- 2.9. Cyanosis: Bluish discoloration of the skin and mucous membranes from decreased oxygenation
- 2.10. Acanthosis Nigricans: Eruption of velvety wart-like growths accompanied by darkening in the skin of the axillae, neck, and groin
- 2.11. Muscle Tone: Normal state of balanced tension in the muscles
- 2.12. Palpation: Method of feeling with the fingers or hands during a physical examination
- 2.13. Sternomastoid Muscle: Thick muscle on each side of the neck
- 2.14. Auscultation: Listening for sounds produced within the body

- 2.15. Thyroid Isthmus: Part of the thyroid gland, anterior to the trachea, which joins the two lateral lobes of the gland



- 2.16. Cricoid Cartilage: Ring of cartilage that surrounds the trachea, or windpipe. It is located near the middle and center of the neck
- 2.17. Aortic valve: is at the second right intercostal space at the sternal border
- 2.18. Pulmonic valve: is at the second left intercostal space at the sternal border
- 2.19. Tricuspid valve: is at the fifth left intercostal space at the sternal border
- 2.20. Point of Maximal Impulse (PMI): is at the apex; fifth left intercostal space at the midclavicular line
- 2.21. Percussion: Diagnostic procedure designed to determine density of a body part by sound produced by tapping surface with finger
- 2.22. Tympany: A hollow drum-like sound that is produced when a gas-containing cavity is tapped sharply
- 2.23. Resonance: The prolongation and intensification of sound produced by transmission of its vibrations to a cavity, especially such a sound elicited by percussion. Decrease of resonance is called dullness
- 2.24. Pharynx: Throat
- 2.25. Exudate: Any fluid exuded out from a tissue or its capillaries as the result of injury, inflammation or infection
- 2.26. Erythema: Redness of the skin caused by congestion of the capillaries in the lower layers of the skin. It occurs with any skin injury, infection, or inflammation
- 2.27. Tonsillar Hypertrophy: Enlargement of the tonsils
- 2.28. Jaundice: Yellowing of the whites of the eyes and skin from an increased level of bile pigments in the blood caused by liver disease
- 2.29. Costal Angle:



3. PROCEDURE BODY

The following document provides guidance for all clinical staff responsible for the Telepresenting of patients to Gastroenterology Services or any provider who may need a component of a gastroenterology history/physical exam. The presenter will be proficient in providing gastroenterology exam data via Telehealth technologies while working within scope of practice

3.1. Pre-consult preparation

- a. See [Core Telepresenting Procedure](#)
 - b. Be sure to select the appropriate provider and the necessary package that coincides with the visit
 - Vitals for under 3 years of age
 - Weight (on baby scale) ****naked**** (very important)
 - Length (mark head and foot on paper) measure in cm
 - Pulse
 - Temp
 - Head circumference in cm
 - Vitals for over 3 years of age
 - Weight
 - Height
 - Pulse
 - Temp
 - Blood pressure
- Refer to [ACO Blood Pressure Screening Process](#)

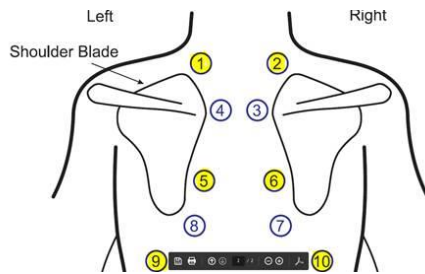
3.2. Provider Directed Physical Exam:

- a. **Eye assessment:** Using the hand held camera, or room video camera, zoom in on the eyes. The provider will inspect the eyes for:
 - Pallor
 - Sclera icterus
 - PERRLA
- b. **Mouth assessment:** With the hand held camera, assist the provider to inspect the mouth paying attention to:
 - Pharynx for:
 - Exudate
 - Erythema
 - Tonsillar Hypertrophy
 - Teeth
 - Mouth for ulcers
- c. **Thyroid assessment:** With the hand held camera or room camera, assist the provider to inspect the neck for the thyroid gland

- The thyroid is located just below the cricoid cartilage
- Direct peripheral lighting with goose neck lamp at the front of patient's neck to allow the provider to inspect the region below the cricoid cartilage (located just below the thyroid cartilage [Adam's apple]). The thyroid is located just below the cricoid cartilage. The lower border of the large thyroid gland will be outlined with peripheral lighting
- With the patient's head tipped back, instruct the patient to sip some water
- The patient's thyroid will move up under your fingers as they swallow
- The provider will be watching for upward movement of the thyroid gland, noting its contour and symmetry
- If the provider requests the Telehealth nurse palpate the thyroid gland:
 - Have the patient in a sitting position
 - Instruct the patient to sit up straight and bend their head slightly forward and to the right to relax the muscles
 - Stand behind the patient
 - Place the fingertips of both hands on either side of the trachea just below the cricoid cartilage
 - Use the fingers on your left hand to push the trachea slightly to the right

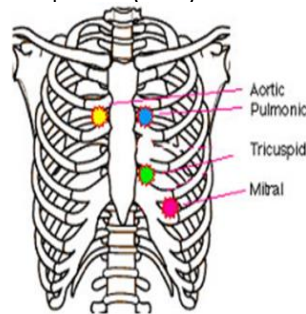
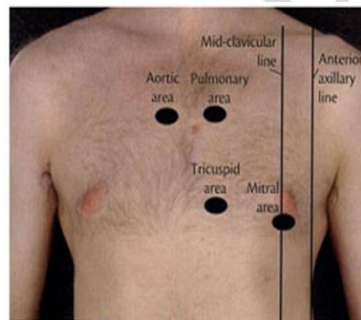


- Instruct the patient to sip some water
 - Feel the thyroid isthmus rise up under the finger pads. Please note it is often not palpable
 - Repeat the exam in the same fashion on the left
 - Report surface (lumpy or hard), enlargement (right > left), consistency of the gland, along with any nodules or tenderness
- d. Lung assessment:**
- Position patient so his or her posterior side is to the room camera
 - Place limited pressure with the digital stethoscope at the six posterior lung fields for two complete breaths or until prompted by provider to switch landmarks
 - Begin with upper lobes of lung, moving the diaphragm of the stethoscope in a ladder-like pattern, from one side to the other. This will allow the provider to identify patterns of breath sounds and compare symmetric areas of the lungs
 - Position patient with anterior side facing the room camera. Use the digital stethoscope to auscultate two anterior lung fields or until prompted by provider to switch landmarks



e. **Heart assessment:**

- Position patient's anterior side to room camera and apply limited pressure to the digital stethoscope to auscultate in the four landmarks below:
 - Aortic valve
 - Pulmonic valve
 - Tricuspid valve
 - Mitral Valve/Point of Maximal Impulse (PMI)



- Watch the provider for cues to move to the next landmark

f. **Abdominal assessment:** be prepared to use both room camera and hand held camera for provider directed abdominal assessment

- Auscultation
 - Place patient in supine position and place digital stethoscope on patient's right periumbilical area to assess bowel sounds
- Skin assessment of abdomen
 - Look for any surgical scars
- Palpation of abdomen on exam table
 - May try the following measures to enhance complete muscle relaxation:
 - Teach patient to breathe slowly
 - Engage patient in conversation
 - Technique:
 - Use flat part of hand or pads of fingers, not fingertips
 - Fingers should be together
 - Avoid sudden jabs

PROCEDURE

Use light(push down 1 cm) to deeper(push down 5-8 cm)
pressure

- Note any tenderness, masses, firmness. Instruct patient to indicate if they experience any discomfort during palpation. Watch for non-verbal signs of discomfort e.g. patient pulls away, facial expressions
- Provider will speak with patient and guide palpation
- Percussion of abdomen on exam table
 - Useful for finding outlines of organs, masses, or fecal masses
 - Sound include:
 - dullness- heard over organs; liver and spleen
 - tympany- heard over areas with gas; stomach and intestines
 - resonance- heard over lungs
 - Technique:
 - Place left hand on patient's right upper abdomen
 - Tap gently on middle finger of left hand using three fingers from the right hand moving the wrist
 - Move left hand to percuss entire abdomen as directed by provider

g. Liver assessment:

Place your left hand behind the patient, parallel to and supporting the right 11th and 12th ribs and lift up to support abdominal contents

Remind the patient to relax into your hand if necessary

Press your left hand forward so the liver may be easily felt



Place your right hand on the patient's right upper quadrant with your fingers lateral to the rectus muscle

Gently press in and up

Ask the patient to take a deep breath and try to feel the edges of the liver

- If the liver is palpable, the edge should be soft, sharp, and regular with a smooth surface

Measure length below mid costal angle

- On inspiration, the liver is palpable about 2 cm below the right costal margin in the midclavicular line



h. Spleen assessment:

With your left hand, reach over and around the patient to support and press forward the lower rib cage

With your right hand below the left costal margin, press in towards the spleen



Begin palpation at the pelvis so you can feel a possible enlarged spleen

Ask the patient to take a deep breath and try to feel the spleen edge

- You should not feel anything firm

i. G tube assessment: Be prepared to use the hand held camera for a provider directed G-tube assessment

- Note size (French and length) and type of G tube (Mickey vs AMT)
- Check to see if it can be rotated easily and move up and down easily to assess if it's not too tight
- Evaluate underlying skin for excoriation, erythema, discharge or granulation tissue

j. Extremity assessment: Be prepared to use the hand held camera for a provider directed extremity exam. Inspect and assess extremities for:

- Clubbing
- Color
- Capillary refill

Pressure is applied to the nail bed until it turns white

Once the nail bed turns white, remove pressure

PROCEDURE

Measure the time it takes for the nail bed to turn pink again

- Pedal edema- lower extremities only
- Tone/Joints: provider will assess muscles and range of motion through Telepresenter
 - Upper extremities
 - shoulders
 - elbows
 - wrists
 - fingers
 - Lower extremities
 - hips
 - knees
 - ankles
 - Compare findings from left side to right side
 - Report any abnormal findings in muscle tone or joint pain/swelling to provider

k. **Skin assessment:** Assess the skin for:

- Jaundice
- Rash
- Birth marks
- Acanthosis Nigricans (darkening of the skin)

3.3. Post physical exam

a. See [Telehealth Core Presenting Procedure](#)

3.4. Post consult considerations

a. See [Telehealth Core Presenting Procedure](#)

4. ADDITIONAL RESOURCES

4.1. References:

- <http://medical-dictionary.thefreedictionary.com>
- <https://medlineplus.gov/ency/article/003394.htm>
- Bickley, L. Bates' Guide to Physical Examination and History Taking. 10th ed. Philadelphia, PA: Lippincott Williams & Wilkins; 2009.

4.2. Supporting documents available:

- Document Control Process

- Document Control Procedure

5. DOCUMENT HISTORY

Version No.	Revision Description
1.0	New Document

6. DOCUMENT PROPERTIES

Primary Author: Dvoran, Sharon M

Co-Author(s):

Approver(s): This document has been electronically signed and approved by: Meyer, Christopher L on: 10/6/2017 9:12:10 AM

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PROCEEDURE