

DPR: History and Physical Exam of the Gastrointestinal System Part I

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Make.
Heal.
Innovate.
Reinvent the Future.

Anatomy



Abdominal Region	Contents
Right hypochondriac region	Liver, gallbladder, ascending colon, transverse colon, small intestine, hepatic flexure, right kidney
Epigastric region	Esophagus, stomach, liver, pancreas, spleen, small intestine, transverse colon, right and left (kidneys, adrenal, ureters)
Left hypochondriac region	Stomach, liver (tip), tail of pancreas, small intestine, transverse colon, descending colon, splenic flexure, left kidney, spleen
Right lumbar region	Liver (tip), gallbladder, small intestine, ascending colon, right kidney
Umbilical region	Stomach, pancreas, small intestine, transverse colon, right and left (kidneys, adrenal, ureters)



Abdominal Region	Contents
Left lumbar region	Small intestine, descending colon, left kidney (tip)
Right iliac region	Small intestine, appendix, cecum, ascending colon, right ovary and fallopian tube
Hypogastric region	Small intestine, sigmoid colon, rectum, right and left ovaries, right and left ureters, urinary bladder, uterus, right and left (ovaries and fallopian tubes), vas deferens, seminal vesicles, prostate
Left iliac region	Small intestine, descending colon, sigmoid colon, left ovary and fallopian tube



Examination Techniques



1st - Inspect



2nd - Auscultate



3rd - Percuss



4th - Palpate



Inspection



Inspect Abdominal Wall

- Contour
 - Symmetry, Masses
- Skin
 - Scars, striae
 - Dilated Veins, Discoloration
 - Rash or lesions
- Umbilicus
- Motion
- Pulsations

Remember
to observe
from the
right side!

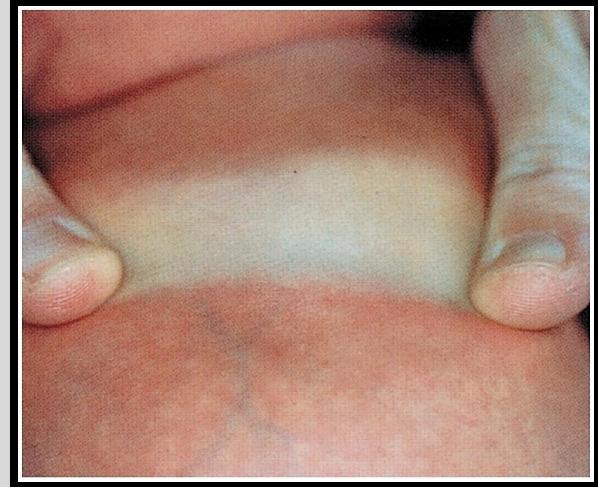


Inspect Abdomen for Jaundice

- Pre-hepatic
 - Red blood cells rupture faster than the liver can conjugate bilirubin
- Hepatic
 - Liver's inability to conjugate or excrete bilirubin
- Post-hepatic
 - Flow of bile into the intestine is blocked

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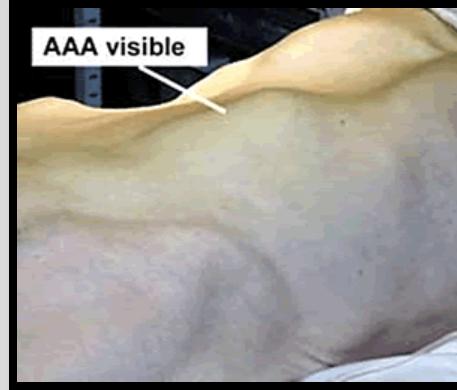


Inspect Abdomen for Pulsations and Peristalsis

- Abdominal aortic aneurysm may be visible as a pulsatile mass
- Visible peristalsis is usually the result of intestinal obstruction

Visible peristalsis video:

<http://www.nejm.org/doi/full/10.1056/NEJMcm0910079>



Auscultation



Bowel Sounds - Normoactive

- Normal (normoactive): estimated frequency of 5 to 34 “clicks or gurgles” per minute.
- Bowel sounds are produced by peristalsis of the intestines
- Occurs intermittently:
 - Low-pitched
 - Chuckling



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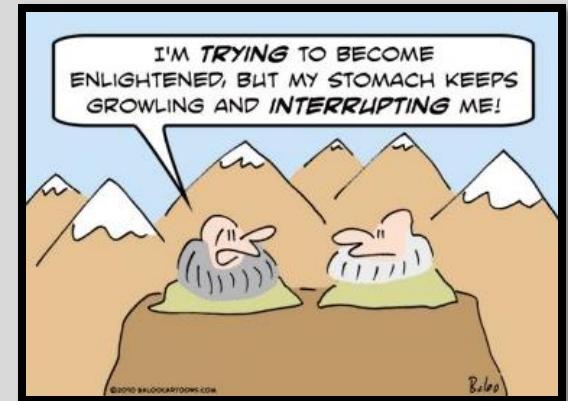


Auscultation of Abdomen for Other Bowel Sounds

- **Borborygmi:** Prolonged gurgles of hyperperistalsis; stomach "growling" or "rumbling".
- **High-pitched tinkling sounds:** Suggestive of dilated bowel due to the presence of air and fluid under tension
- **Rushes of high-pitched sounds** that coincide with abdominal cramps: Suggestive of intestinal obstruction

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Percussion



Palpation

