

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

Sonia Rivera-Martinez, DO, FACOFP
Associate Professor, Dept. of Family Medicine
srmartin@nyit.edu



Do.
Make.
Heal.

Innovate.
Reinvent the Future.

Anatomy



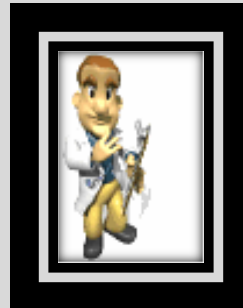
| Abdominal Region | Contents |
|----------------------------|---|
| Right hypochondriac region | Liver, gallbladder, ascending colon, transverse colon, small intestine, hepatic flexure, right kidney |
| Epigastric region | Esophagus, stomach, liver, pancreas, spleen, small intestine, transverse colon, 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!**

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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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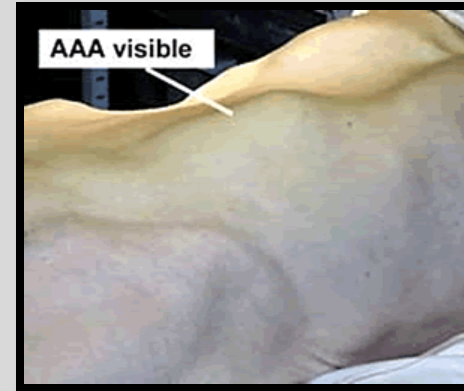


Inspect Abdomen for Pulsations and Peristalsis

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- 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/NEJMicm0910079>

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

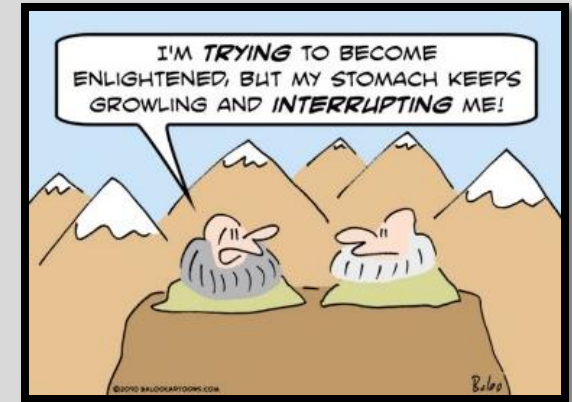


Auscultation of Abdomen for Other Bowel Sounds

- **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

