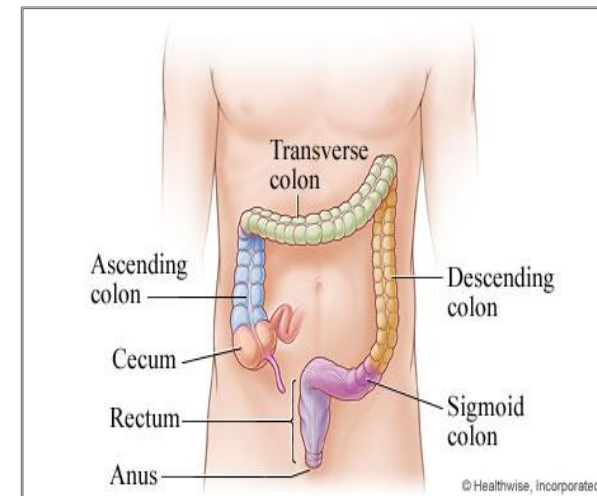
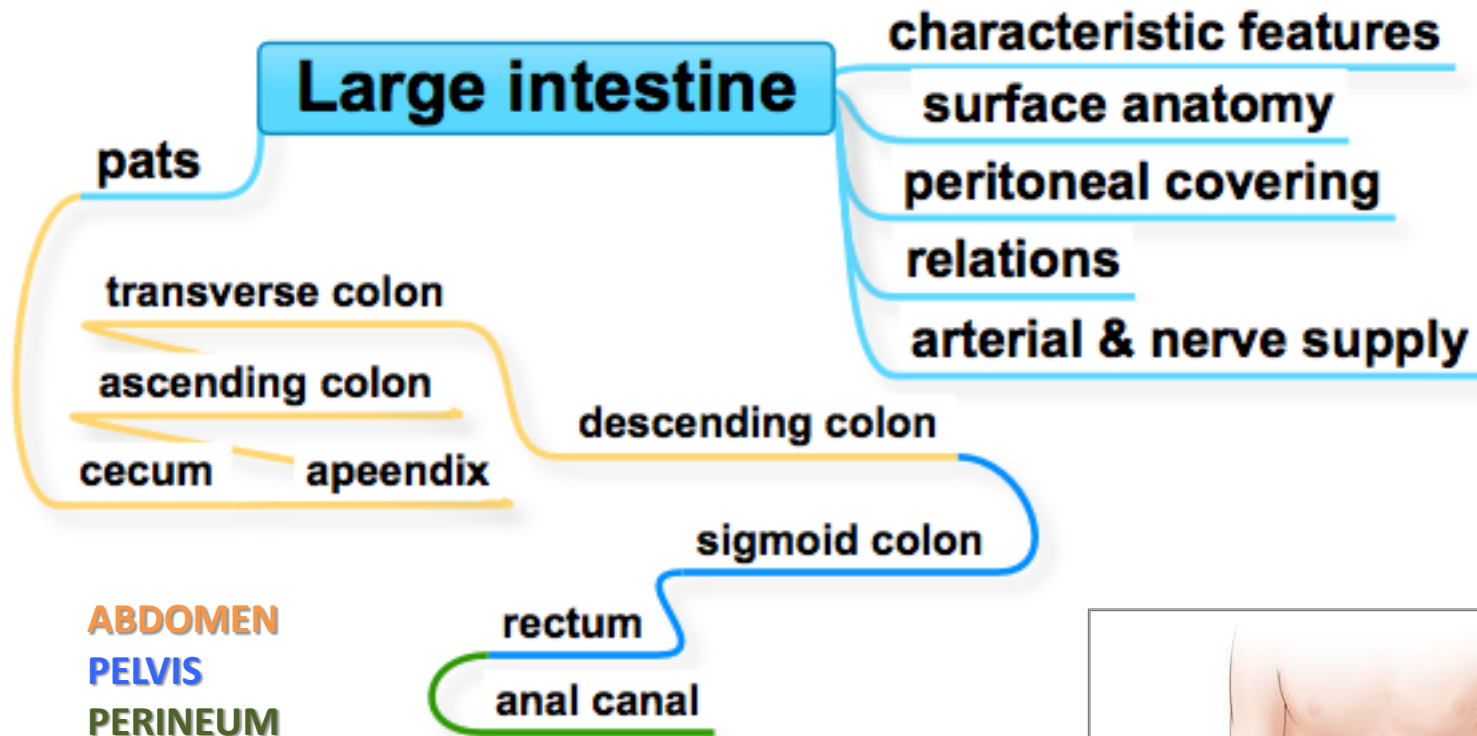




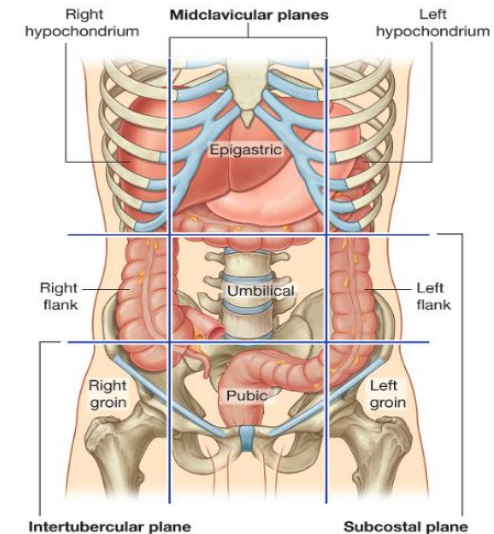
L5-Anatomy of large intestine

MIND MAP



PARTS OF LARGE INTESTINE

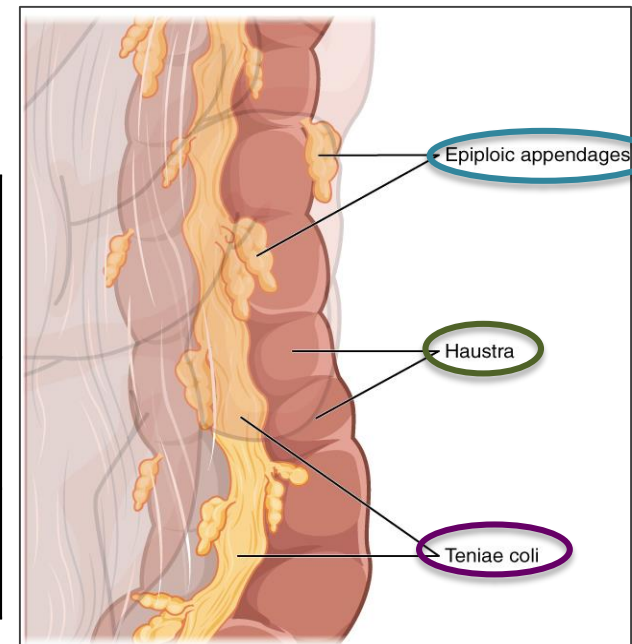
Abdomen	Pelvis	Perineum
<ul style="list-style-type: none"> ■ Cecum ■ Appendix ■ Ascending colon ■ Transverse colon ■ Descending colon 	<ul style="list-style-type: none"> ■ Sigmoid colon =(Sigmoid pelvis) ■ Rectum 	<ul style="list-style-type: none"> ■ Anal canal



Characteristics of colon

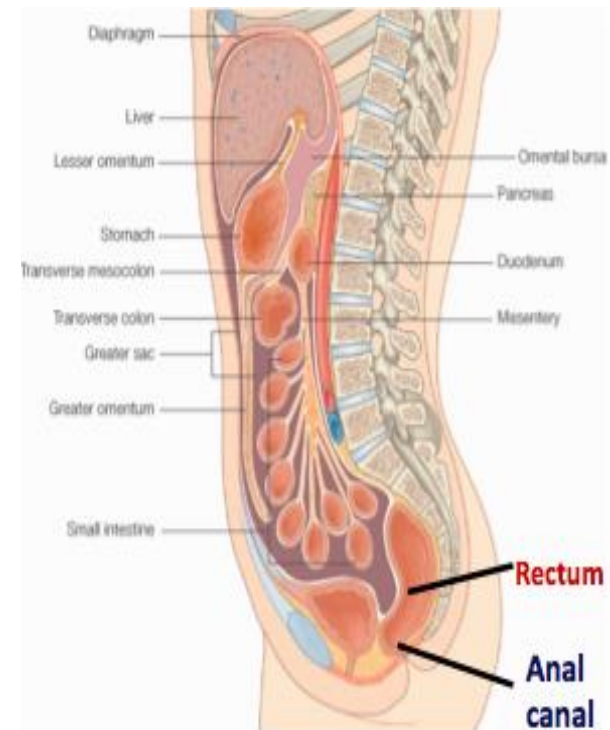
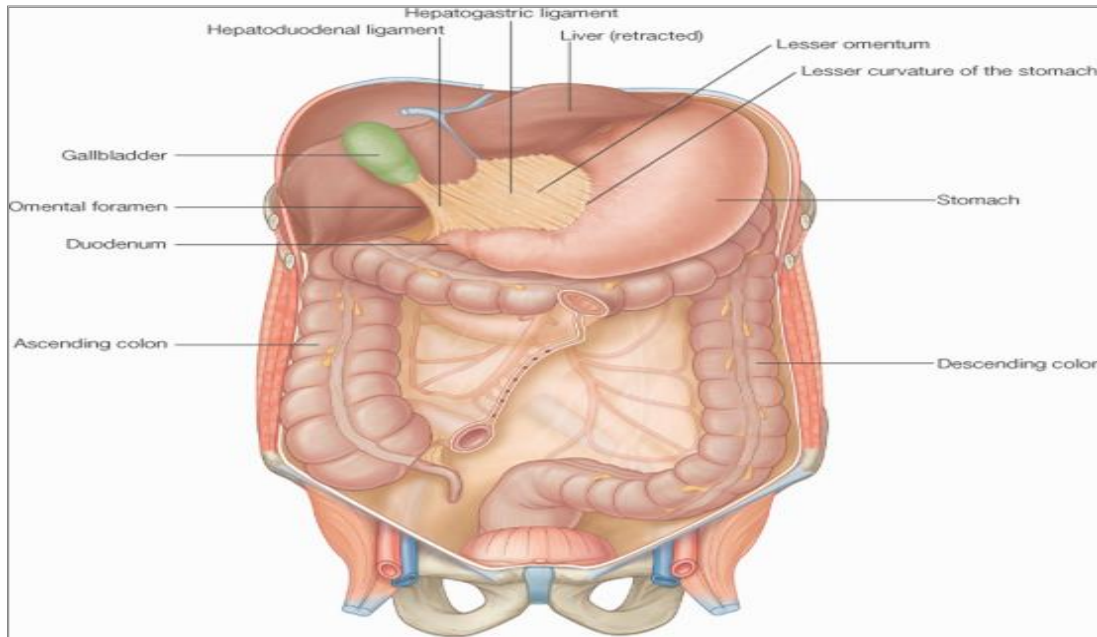
(NOT FOUND IN RECTUM & ANAL CANAL)

1) Taeniae coli	(3) longitudinal muscle bands. (Smooth muscles can be seen by naked eyes)
2) Sacculations (Haustra)	Because the Taeniae coli are shorter than large intestine.
3) Epiploic Appendices	Short peritoneal folds filled with fat.



PERITONEAL COVERING

PARTS <u>WITH MESENTERY</u> CATS	<u>RETROPERITONEAL</u> PARTS ADU	PARTS <u>DEVOID*</u> OF PERITONEAL COVERING
<ul style="list-style-type: none"> ■ <u>C</u>ecum ■ <u>A</u>ppendix ■ <u>T</u>ransverse colon ■ <u>S</u>igmoid colon 	<ul style="list-style-type: none"> ■ <u>A</u>scending colon* ■ <u>D</u>escending colon ■ <u>U</u>pper 2/3 of rectum 	<ul style="list-style-type: none"> ■ <u>L</u>ower 1/3 of rectum ■ Anal canal



*Devoid= uncovered

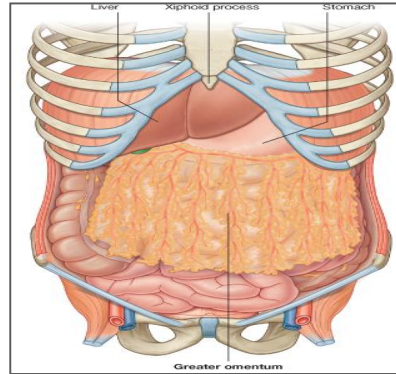
* Ascending colon thicker than Descending > the material inside it move against gravity

Relations of (Cecum , Ascending, Descending colons)

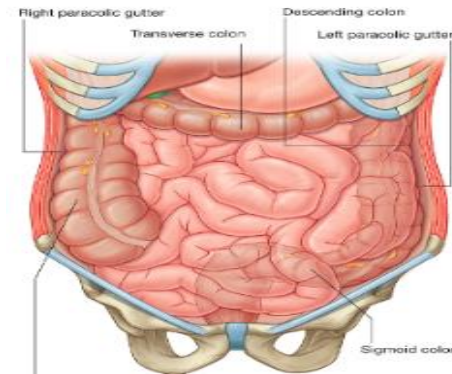
ANTERIOR RELATION



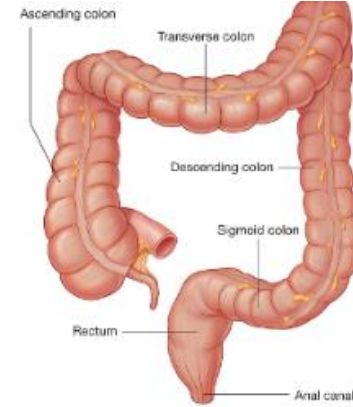
Anterior abdominal wall



Greater omentum



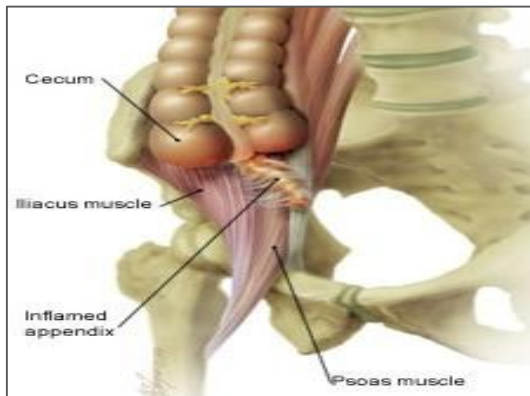
Coils of small intestine



POSTERIOR RELATION

Cecum

- **Psoas major**
- **Iliacus**

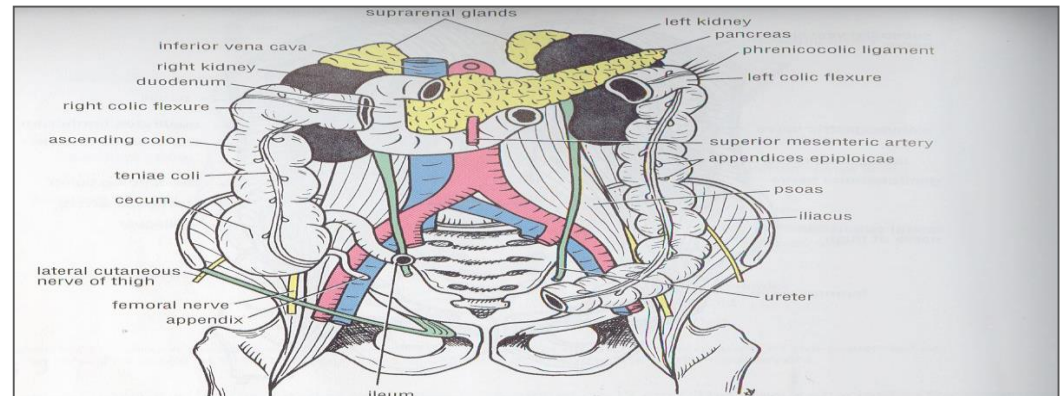


Ascending

- **Right kidney**
- **Quadratus lumborum**
- **Iliacus**

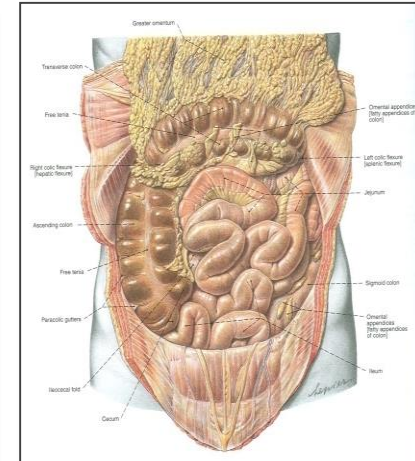
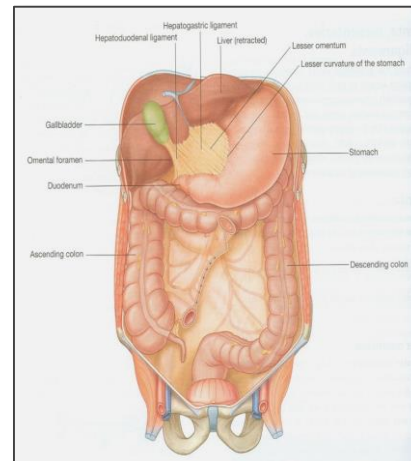
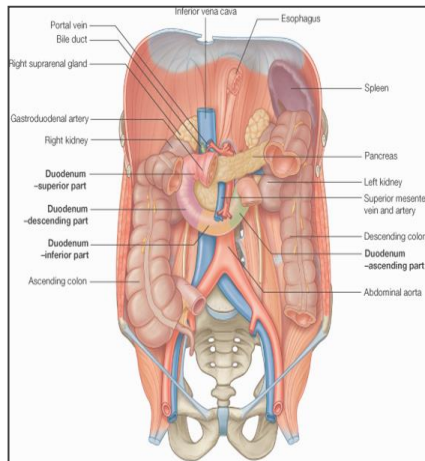
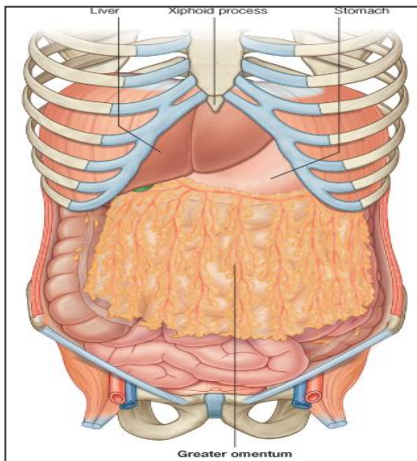
Descending

- **Left kidney**
- **Quadratus lumborum**
- **Iliacus , Psoas major**



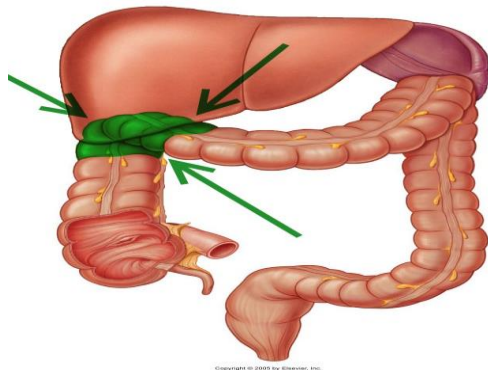
RELATIONS OF TRANSVERSE COLON

Anterior	Posterior	Superior	Inferior
<ul style="list-style-type: none"> Anterior abdominal wall Greater omentum 	<ul style="list-style-type: none"> 2nd part of duodenum Pancreas Superior mesenteric vessels. 	<ul style="list-style-type: none"> Liver Gall bladder Stomach 	<ul style="list-style-type: none"> Coils of small intestine

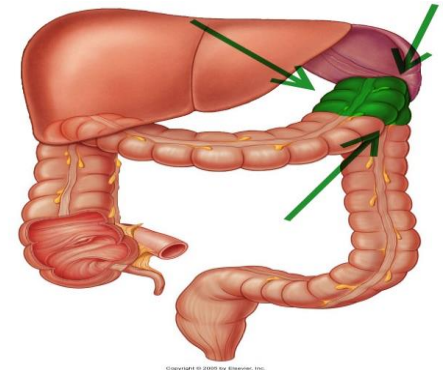


COLIC FLEXURES

Left colic flexure is **higher** and **more acute**

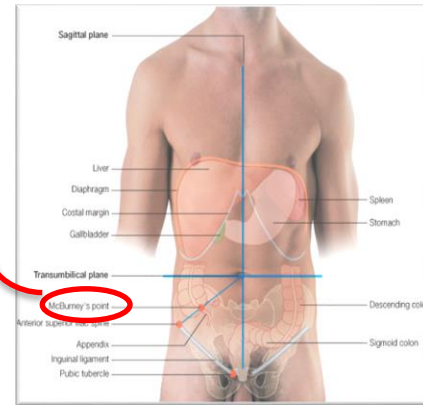


Hepatic flexure (right colic flexure)



Splenic flexure (left colic flexure)

APPENDIX



Surface anatomy:

the base of appendix is marked by McBurney's point

What is McBurney's point ?

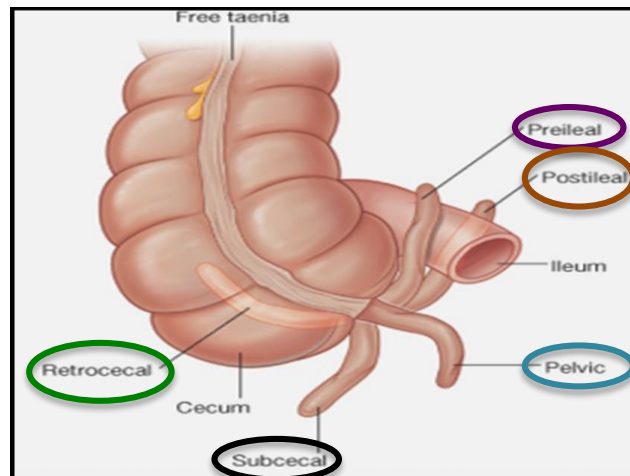
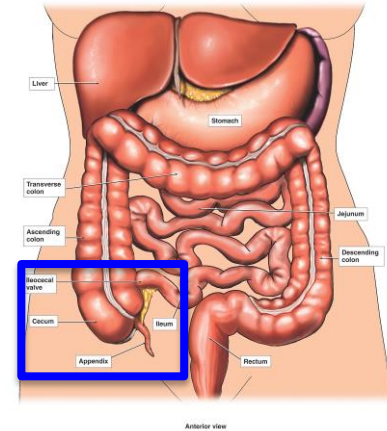
A point at the junction of lateral 1/3 & medial 2/3 of a line traced from right anterior superior iliac spine to umbilicus.

Opening:

At posteromedial aspect of cecum, 1 inch below ileo-cecal junction

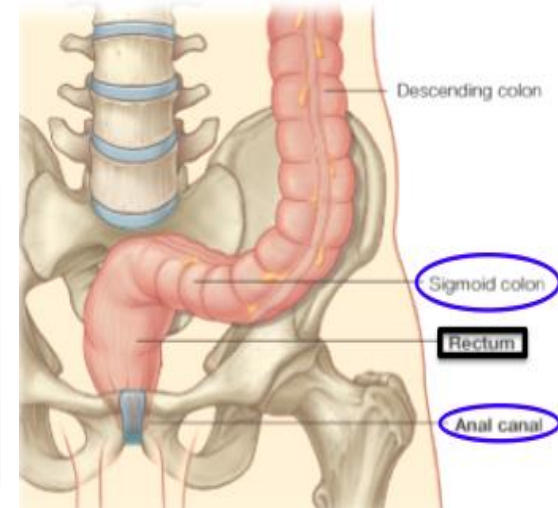
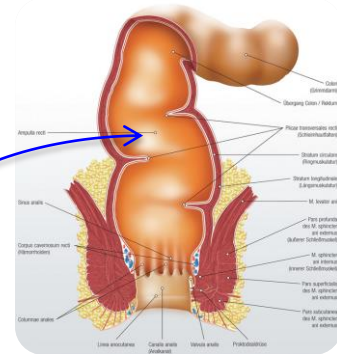
Positions:

1. **Retrocecal** (most common)
2. Pelvic
3. Subcecal
4. Preileal
5. Postileal (least common)



RECTUM

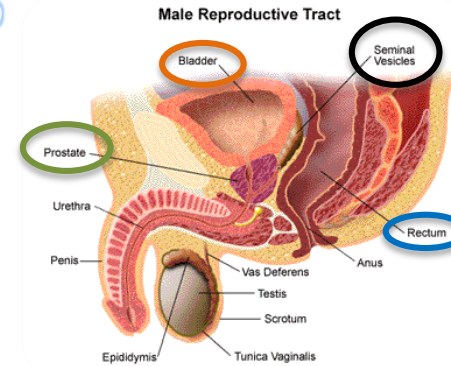
Beginning	Termination
as a continuation of <u>sigmoid colon</u>	continues as <u>anal canal</u>
at level of <u>S3</u> .	one inch below & in front of tip of coccyx.
	Its end is <u>dilated</u> to form the <u>rectal ampulla</u>



RELATIONS OF RECTUM IN PELVIS

NOTE: The **anterior** relations are **different** in **male** and **female** **BUT** the **posterior** are the same.

male



female

Anterior:

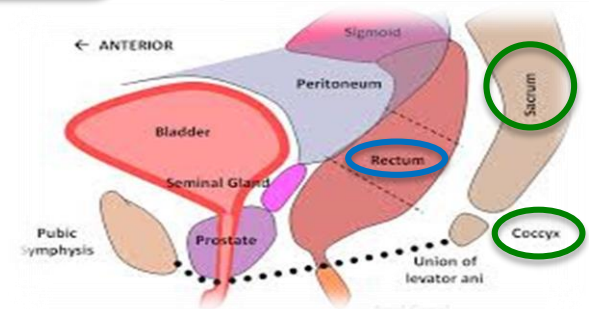
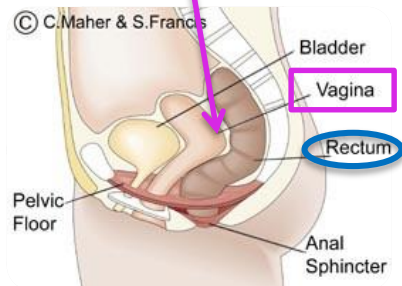
1. Posterior wall of vagina

Anterior:

1. Seminal vesicles.
2. Posterior surfaces of urinary bladder.
3. Prostate gland

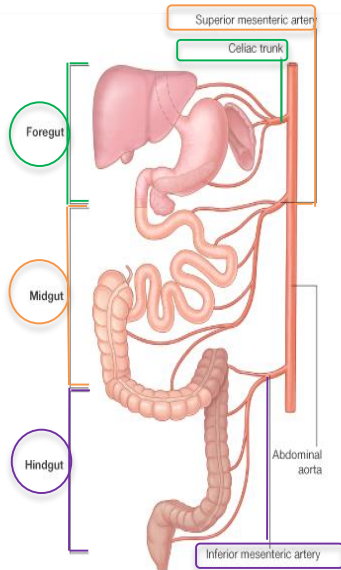
Posterior:

1. sacrum.
2. sacral plexus
3. coccyx

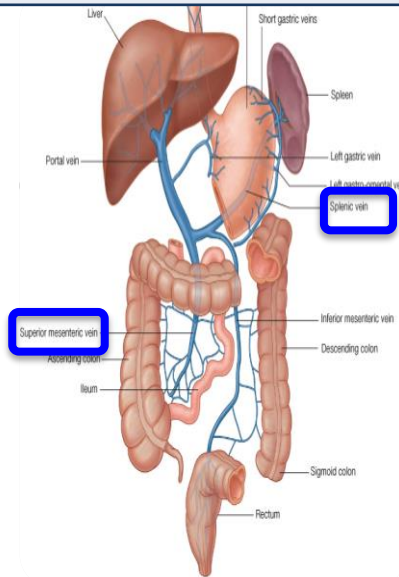


Relation Between Embryological Origin of GIT & its Arterial & nerve Supply

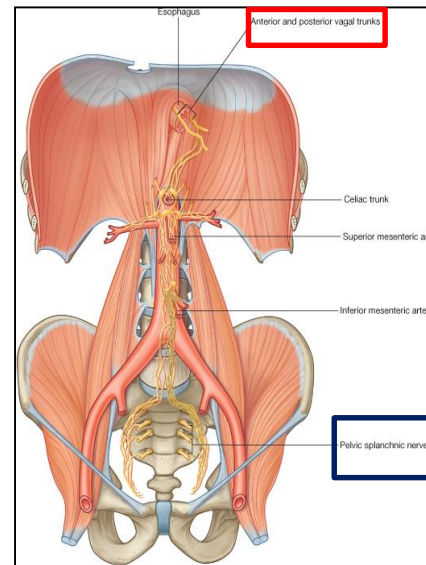
Origin	MIDGUT (endoderm)	HINDGUT (endoderm)	lower 1/3 of anal canal (ectoderm)
	Cecum, appendix, ascending colon, R 2/3 transverse colon	L 1/3 transverse colon, descending, sigmoid colon, rectum	
ARTERY	superior mesenteric artery	inferior mesenteric artery	inferior rectal
TYPE OF NERVE SUPPLY	Autonomic	Autonomic	Somatic
NERVE SUPPLY	Sympathetic + <u>Vagus</u>	Sympathetic + <u>pelvic splanchnic nerves</u>	inferior rectal
VENOUS DRAINAGE OF GIT	The veins of the <u>gut form the tributaries of the portal vein</u> which <u>enters the liver and drains into the portal circulation.</u>		
LYMPH DRAINAGE OF GIT	The lymph vessels follow the arteries. Ultimately, <u>all the lymph is collected at the Preaortic lymph nodes (Superior & Inferior mesenteric).</u>		



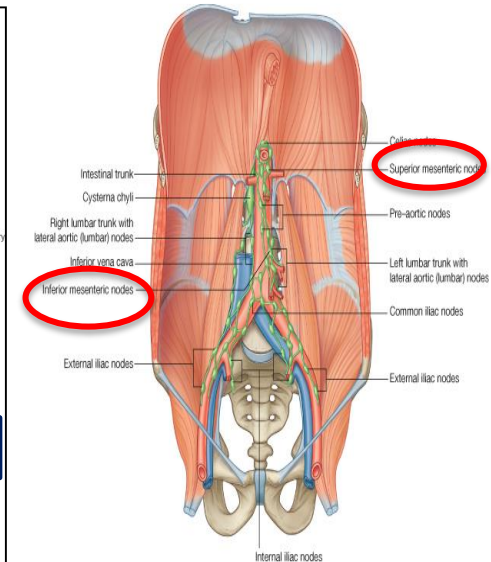
ARTERY



VENOUS DRAINAGE



NERVE SUPPLY



LYMPH DRAINAGE

1-Which of the following In the Posterior Relations of the cecum:

- A. Psoas major
- B. Quadratus lumborum
- C. Right kidney
- D. Left kidney

2-Which of the following In the superior relations of the transverse colon:

- A. coils of small intestine
- B. liver, gall bladder
- C. 2nd part of duodenum
- D. greater omentum, anterior abdominal wall

3-The termination of the rectum is:

- A. as a continuation of sigmoid colon at level of S3.
- B. continues as anal canal, one inch below & in front of tip of coccyx.
- C. sacral plexus & coccyx

4-Which one of the following is the nerve supply of the Hindgut (endoderm):

- A. Sympathetic + pelvic splanchnic nerves
- B. Somatic (inferior rectal)
- C. Sympathetic + Vagus

5-all the lymph in the GIT is collected at the:

- A. Preaortic lymph nodes (Superior & Inferior mesenteric).
- B. Preaortic lymph nodes (anterior & Inferior mesenteric).
- C. postaoortic lymph nodes

6-In which one of the following regions lies McBurney's point?

- A. Right iliac fossa
- B. Hypogastrium
- C. Right lumbar region
- D. Umbilical region

7-Which one of the following parts of large intestine is found in the pelvis?

- A. Transverse colon
- B. Anal canal
- C. Rectum
- D. Cecum

8-Which one of the following is the commonest site of the vermiform appendix?

- A. Pelvic
- B. Preileal
- C. Retrocecal
- D. Subcecal

9-Which ONE of the following parts of large intestine has mesentery?

- A. Ascending colon
- B. Descending colon
- C. Rectum
- D. Sigmoid colon

10-Which ONE of the following parts of large intestine RETROPERITONEAL ?

- A. Cecum
- B. Descending colon
- C. Appendix
- D. Sigmoid colon

MCQs

1-Which ONE of the following parts of large intestine DEVOID OF PERITONEAL COVERING?

- A. Anal canal
- B. Descending colon
- C. Appendix
- D. Sigmoid colon

2-Which one of the following is the least common site of the vermiform appendix?

- A. Pelvic
- B. Postileal
- C. Retrocecal
- D. Subcecal

3-Which one of the following parts of large intestine is found in the ABDOMEN?

- A. Sigmoid colon
- B. Anal canal
- C. Rectum
- D. Cecum

4-Which one of the following parts of large intestine is found in the PERINEUM?

- A. Sigmoid colon
- B. Anal canal
- C. Rectum
- D. Cecum

5- at which one of the following levels rectum will begin??

- A. S2
- B. S3
- C. S4
- D. S5

6-Which one of the following is anterior relation of RECTUM in MALE PELVIS?

- A. Urethra
- B. Vas deferens
- C. Urinary bladder
- D. Sacrum

7- RIGHT colic flexure is higher and more acute than the LEFT?

- A. True
- B. False

8- the parasymphathetic supply of MIDGUT?

- A. Inferior rectal
- B. pelvic splanchnic nerves
- C. Vagus

9- Which one of the following structures lies in the posterior relation of transverse colon??

- A. Liver
- B. Stomach
- C. Coils of small intestine
- D. Pancreas

10-Which one of the following structures lies in the posterior relation of Descending colon?

- A. Abdominal aorta
- B. Left kidney
- C. Stomach
- D. pancreas



Anatomy Team

433



GOOD LUCK

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