



Anatomy of The Large Intestine

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Parts of Large Intestine

		abdomen			pelvis		perineum
CECUM	APPENDIX	ASCENDING COLON	TRANSVERSE COLON	DESCENDING COLON	SIGMOID COLON	RECTUM	ANAL CANAL

Characteristics of COLON

(not found in rectum & anal canal)

- Taeniae coli:

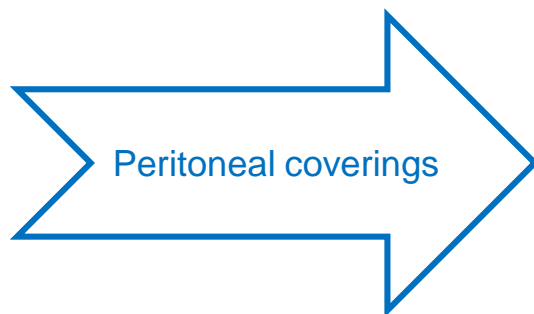
3 longitudinal muscle bands

- Sacculations (Haustra):

Because the Taeniae coli are shorter than large intestine

- Epiploic Appendices:

Short peritoneal folds filled with fat



parts with mesentery

Transverse colon

Sigmoid colon

Appendix

Cecum

retroperitoneal parts

Ascending colon

Descending colon

Upper 2/3 of rectum

parts devoid of peritoneal covering

Lower 1/3 of rectum

Anal canal

Relations of (cecum, ascending colon and descending colon)

Anteriorly	posteriorly		
	cecum	Ascending colon	descending colon
<ul style="list-style-type: none"> Anterior abdominal wall Greater omentum Coils of small intestine 	<ul style="list-style-type: none"> Psoas major Iliacus 	<ul style="list-style-type: none"> Iliacus Quadratus lumborum Right kidney. 	<ul style="list-style-type: none"> Left kidney Quadratus lumborum Iliacus

Colic flexures

flexure	Hepatic	Splenic
Present in	right	left
position	lower	higher
angle	obtuse	more acute

Relations of the transverse colon (oblique)

Anterior	Posterior	Superior	Inferior
<ul style="list-style-type: none"> greater omentum anterior abdominal wall 	<ul style="list-style-type: none"> 2nd part of duodenum pancreas superior mesenteric vessels. 	<ul style="list-style-type: none"> Liver gall bladder Stomach (forms the bed of the stomach separated from it by the lesser sac) 	<ul style="list-style-type: none"> coils of small intestine

Appendix (functionally related to the lymphatic system) has base(fixed) & apex(mobile)

Surface anatomy	Opening	Positions
<p>the base of appendix is marked by Mc'Burney's point</p> <p>Mc'Burney'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</p>	<p>At posteromedial aspect of cecum, 1 inch below ileocecal junction</p>	<p>Apex could be:</p> <ul style="list-style-type: none"> • Retrocecal (most common) • Pelvic • Subcecal (below cecum) • Preileal • Postileal (least common)

Clinically:
We can detect the position of the apex with X-ray

Rectum

Beginning	Termination	length	Relations in rectum		
			Male pelvis	Female pelvis	
as a continuation of sigmoid colon at level of S3	continues as anal canal, one inch below & in front of tip of coccyx. Its end is dilated to form the rectal ampulla.	13 cm (5inches)	anterior	<ul style="list-style-type: none"> • seminal vesicles & vas deferens (both are on the base of urinary bladder) • Posterior surfaces of urinary bladder • prostate gland 	posterior wall of vagina
			posterior	<ul style="list-style-type: none"> • Sacrum • sacral plexus • coccyx 	

If the patient has rectal tumor then will likely develop Sciatica due to the compression applied to the sacral plexus from which sciatic N emerges

relation between embryological origin & blood supply, lymph drainage & nerve supply

artery	vein	lymphatics	Nerve supply
<p>Mid gut (cecum, ascending & right 2/3 of transverse):</p> <p>Superior mesenteric</p>	<p>tributaries of the portal vein (superior & inferior veins) which drain finally into the portal circulation</p>	<p>lymph vessels follow the arteries. collected at the:</p> <p>Preaortic lymph nodes (Superior & Inferior mesenteric)</p>	<p>Midgut (from yolk sac) (endoderm) Nerve supply: (Autonomic) via: Sympathetic + Vagus (parasympathetic)</p>
<p>Hindgut (left 1/3 of transverse, descending and the upper 1/3 of the rectum):</p> <p>inferior mesenteric</p>			<p>Hindgut (endoderm) (including the upper 2/3 of anal canal) Nerve supply: (Autonomic) via: Sympathetic + pelvic splanchnic nerves (parasympathetic) (S2,3 and 4 spinal Ns)</p>
			<p>ectoderm (lower 1/3 of anal canal) Nerve Supply: Somatic via: inferior rectal (origin: sacral plexus> pudendal N> inferior rectal)</p>

MCQs

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. B. liver, gall bladder
- C. C. 2nd part of duodenum
- D. 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. postaortic lymph node

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- A. True
- B. False

18- the parasymphathetic supply of MIDGUT?

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

19- 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

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

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

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Key answers:

- 1.A
- 2.B
- 3.B
- 4.A
- 5.A
- 6.A
- 7.C
- 8.C
- 9.D
- 10.B
- 11.A
- 12.A
- 13.D
- 14.B
- 15.B
- 16.C
- 17.B
- 18.C
- 19.D
- 20.B

Here's to the crazy ones — the misfits, the rebels, the troublemakers, the round pegs in the square holes. The ones who see things differently — they're not fond of rules. You can quote them, disagree with them, glorify or vilify them, but the only thing you can't do is ignore them because they change things. They push the human race forward, and while some may see them as the crazy ones, we see genius, because the ones who are crazy enough to think that they can change the world, are the ones who do.

Steve Jobs

www.wus-up.com

Done by:

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MCQs by:

433 anatomy team work