

## Duodenum.

• first, shortest, widest part of small intestine.

• 25 cm long.

### Extent.

• pylorus to duodenojejunal flexure.

### Shape

• C-shaped → concavity enclosing head of pancreas.

### Location

• above umbilicus, against L<sub>1</sub>, L<sub>2</sub>, L<sub>3</sub> vertebrae.

### Parts.

• Superior - first 5 cm

• Descending - 2<sup>nd</sup> 7.5 cm

• Horizontal - 3<sup>rd</sup> 10 cm.

• Ascending - 4<sup>th</sup> 2.5 cm

## First part

- Extends from pylorus till neck of gall bladder.

↓  
Curves down

↓  
Superior duodenal flexure.

↓  
Continues with 2nd part.

## Features

- develops from foregut.
- partly retroperitoneal.
- no circular folds in initial.
- 2.5cm. → duodenal cap in basium meal.
- site of duodenal ulcer.
- supplied by coeliac trunk branches.

## Relations

anteriorly → gall bladder, quadrate lobe.

posteriorly → Portal vein, gastroduodenal. Art, Common bile duct

superiorly → epiploic foramen

inferiorly → Head & neck of pancreas.

## Second part (Impt)

begins at superior duodenal flexure - pass down  
in front of medial part of right kidney.

@ L3 → curves to left → inferior duodenal flexure.

### Features.

- upper half → foregut lower → midgut.
- receives bile duct, cystic, accessory Pan. duct.

### Relations.

✓ anteriorly → gall bladder, right lobe of liver  
T.C, T. mesocolon.

✓ posteriorly → right kidney, right renal vessel.  
right psoas major, right edge of IVC.

✓ medially → Head of pancreas

✓ laterally → ascending colon, right colic flexure, right lobe of liver.

### Third part

- runs horizontally -  $\rightarrow$  (10cm) to left. across L3 vertebrae.
- takes smooth curve up.  $\rightarrow$  continuous with ascending part of duodenum.

### Relations.

anterior  $\rightarrow$  SM vessel, root of mesentery.

posteriorly  $\rightarrow$  right psoas mjr, right ureter, IVC, abdominal aorta, right gonadal vessels.

superiorly  $\rightarrow$  head of pancreas with uncinate process.

inferiorly  $\rightarrow$  coils of jejunum.

### Fourth part.

• runs upwards to left of aorta.

• Extends from 3<sup>rd</sup> part to duodenojejunal flexure.

### Relations:

anterior  $\rightarrow$  T.C, T.mC.

posterior  $\rightarrow$  left psoas mjr, left sympathetic chain, L. gonadal vessel, inferior mesenteric vein.

left  $\rightarrow$  left kidney, left ureter.

right  $\rightarrow$  upper part of root of mesentery.

# Interior of duodenum.

- valves of Kerkring.
- major duodenal papillae
- minor duodenal papillae.

plica semicircularis  
plica longitudinalis

right row of diaphragm → d-j flexure

## Ligament of Treitz

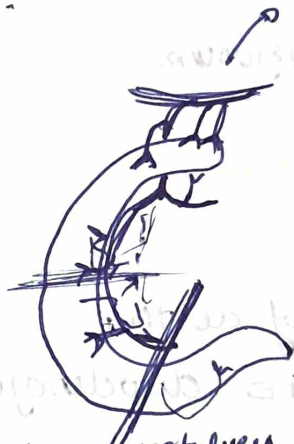
duodenal recess.

- Just give definition.
- draw figure, and name.

contains  
upper → striated muscle fibre.  
middle → elastic fibre  
lower → ~~non striated muscle~~ smooth

sup me arter (gastrodu)

†  
(my mesenteric artery)



## Arterial Supply.

NS → T6 - T9 - sympathetic  
par → vagus nerve  
Venous drainage.

superior part → portal vein

inferior part → superior mesenteric

## Lymphatic

pancreaticoduodenal lymph nodes  
& pyloric nodes.

Coeliac nodes

lymphatics

→ cisterna chyli

Applied.

→ 2nd part duodenal diverticula

Duodenal Cup