

# SMALL INTESTINE

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# SMALL INTESTINE:

- The small intestine is a small tube which connects stomach to the large intestine.
- It begins from the pylorus and terminates at the junction of cecum and colon.
- It has three parts.

1. DUODENUM

2. JEJUNUM

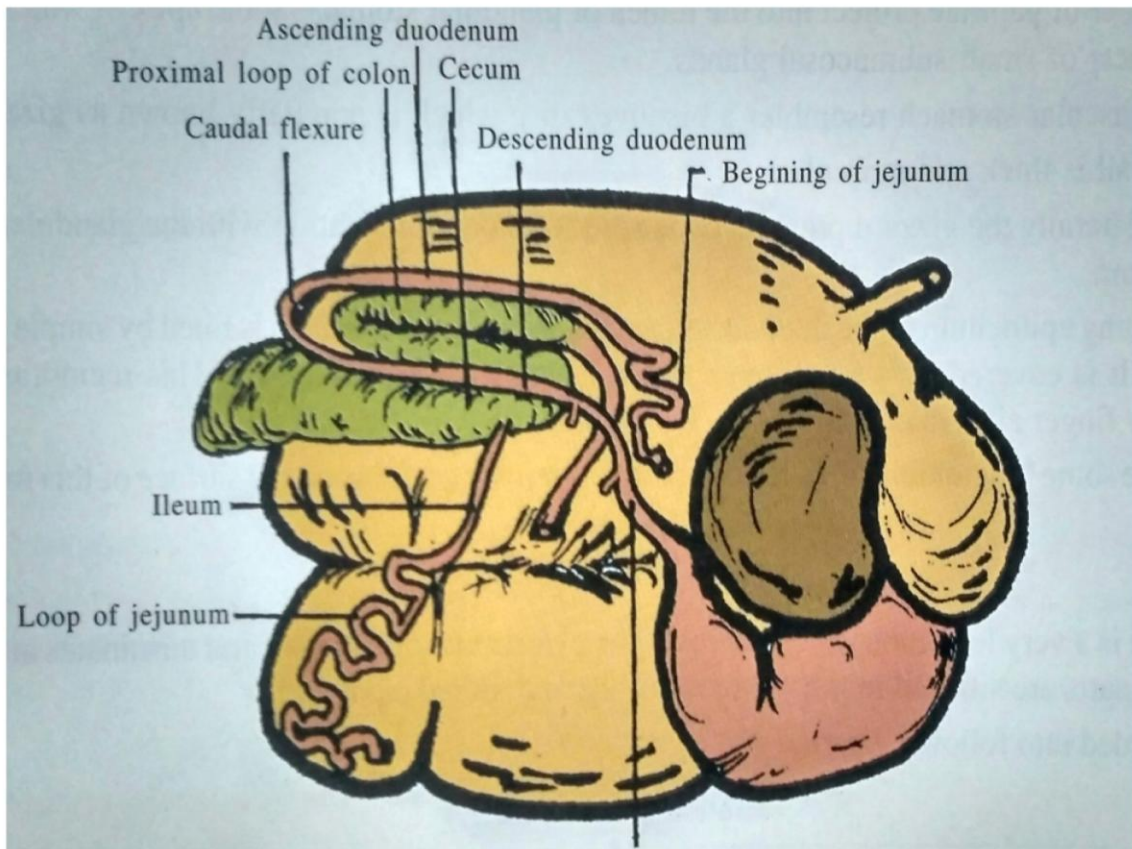
3. ILEUM

# SMALL INTESTINE (OX)

- ◉ It begins at the pylorus and terminates at the caecum. It is divisible into a *fixed part and a mesenteric part*
- ◉ The fixed part is duodenum and mesenteric part is arbitrarily divided into jejunum and ileum
- ◉ Length:-40m., Diameter:-5-6cm.

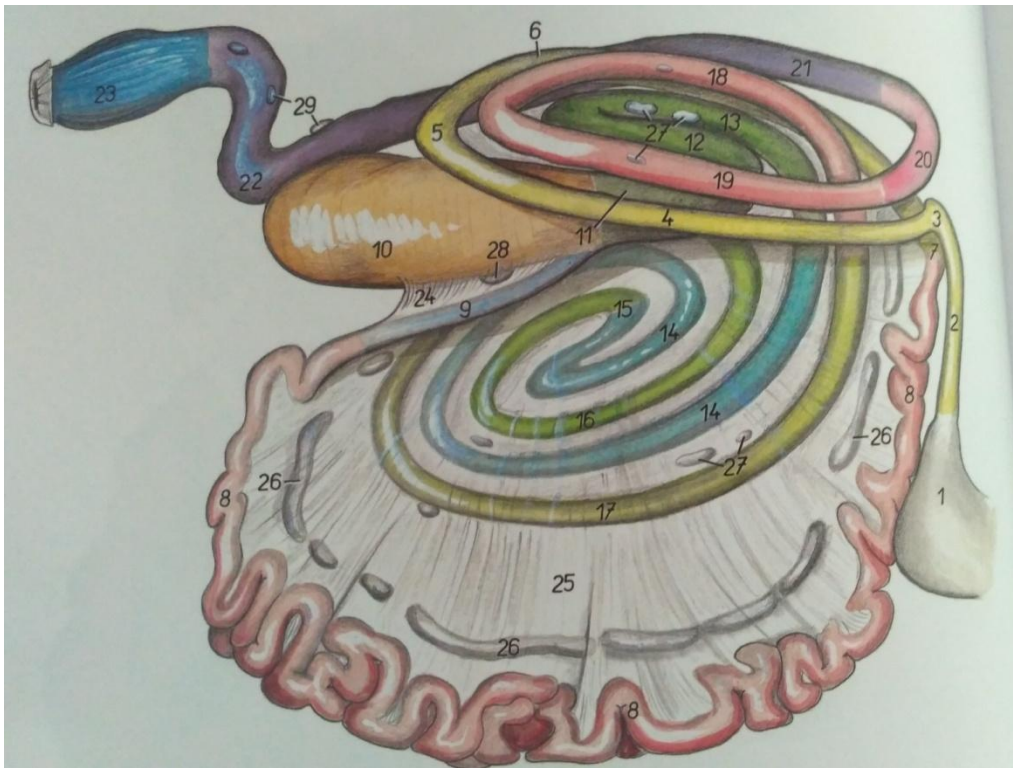
## Duodenum:-

- ◉ Its length is about 1m.
- ◉ It begins at the level of pylorus, its cranial part starts from the visceral surface of the liver forming a S-shaped curve *k/a ansa sigmoidea*.
- ◉ Then it runs caudally and dorsally at the level of tuber coxae/hip bone, (**descending part**).
- ◉ where it is continued by **caudal flexure**. Forming the caudal flexure it turns from right to left around root of mesentery.
- ◉ It runs cranially and terminated at the duodeno-jejunal orifice, on the left side of cranial mesenteric artery. It is the **ascending part of duodenum**.



**SMALL INTESTINE OF OX**

# SMALL INTESTINE OF OX



1. Pylorus
2. First part of duodenum
3. Ansa sigmoidea
4. Descending duodenum
5. Cuadal flexure
6. Ascending duodenum
7. Duodeno- jejunal junction
8. Festoon of jejunum
9. Ileum

- ◉ Attachments of the duodenum:-
- ◉ The cranial part:-lesser omentum
- ◉ The descending colon and tuber coxae:-dorsally by mesoduodenum,ventrally superficial wall of omental bursa.
- ◉ Ascending part:-attached caudally from colon by duodeno-colic ligament.
- ◉ Openings:-
- ◉ Bile duct opens 60cm away from pyloric end.
- ◉ Pancreatic opening 30cm away from bile duct opening.
- ◉ Jejunum:-
- ◉ It is the longest part of Small intestine,it is about 38m. Long.
- ◉ It is present between right surface of rumen and right abdominal wall.
- ◉ It is present in the form of small folds k/a *festoons*,present around the borders of mesentry.

- In its mesentery the blood vessels present in the form of arch.
- Ileum:-
- It is the terminal part of small intestine, it is about 1m long.
- It is attached cranially from the caecum and terminates in the middle of the caecum at caecocolic junction.

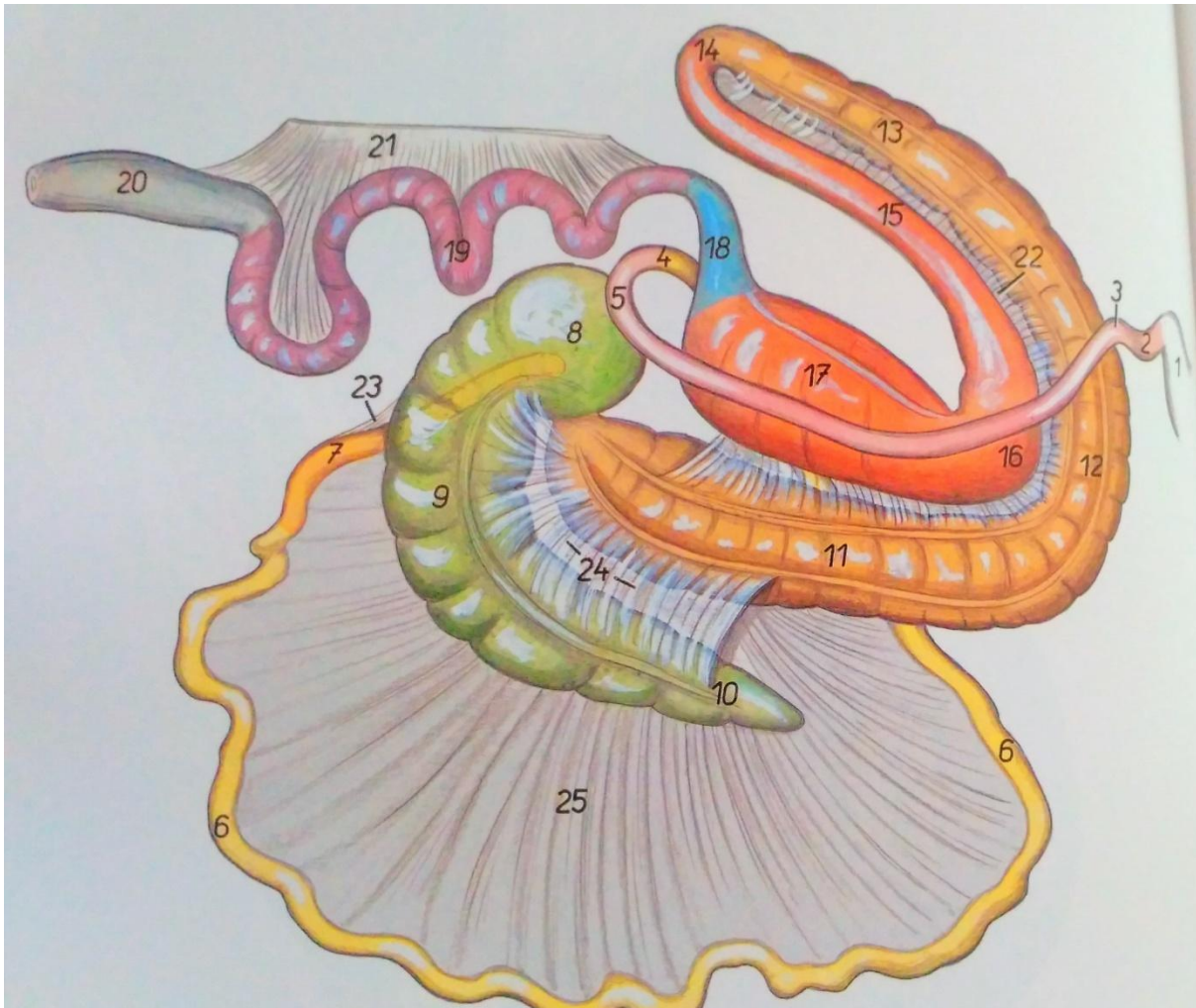


# SMALL INTESTINE(HORSE)

- ◉ Length:-22m.
- ◉ diameter:-7-10cm.
- ◉ **Duodenum:-**
- ◉ It is 1m long.
- ◉ Pancreatic and hepatic duct have common opening in a common sac like opening k/a **Hepatopancreatic ampulla/ampulla of vater**
- ◉ Hepatopancreatic opening is about 12-15cm away from pyloric end.
- ◉ Jejunum & ileum:-
- ◉ Jejunum is 20m. Long .
- ◉ There is no demarcation between jejunum and ileum.
- ◉ Ileum 1m. Long, and opens at the base of caecum.



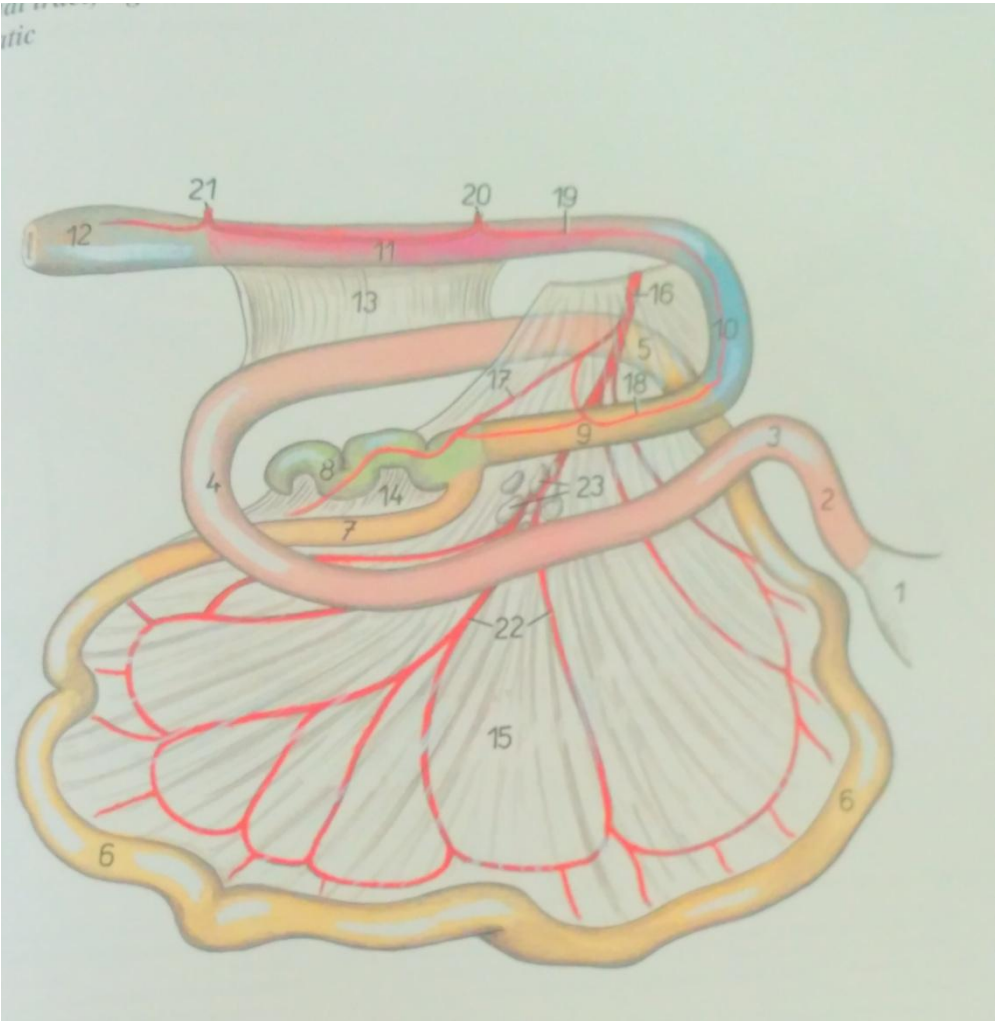
# SMALL INTESTINE OF HORSE



# SMALL INTESTINE(DOG)

- ◉ **Length:-4m.**
- ◉ **Duodenum:-**
- ◉ It is the short part of small intestine.
- ◉ Pancreatic duct have two parts small duct and large duct.
- ◉ The small duct opens along with bile duct about 5-8cm away from the pyloric end.
- ◉ Large duct opens 3-5cm away from the preceding one.
- ◉ **Jejunum:-**
- ◉ It is having 7-8 coils.
- ◉ Situated between stomach and pelvic inlet.
- ◉ **Ileum:-**
- ◉ There is no demarcation between jejunum and ileum.
- ◉ Instead of caecum it opens directly into the colon and the opening is guarded by strong ileo-colic valve.

# SMALL INTESTINE OF DOG



# SMALL INTESTINE(PIG)

- ◉ Length:-16m.
- ◉ Duodenum:-
- ◉ Bile duct opens about 3cm and Pancreatic duct opens 12cm behind the pyloric end.
- ◉ Jejunum:-
- ◉ It is long having many loops and they are supported by mesentery.
- ◉ Ileum:-
- ◉ It is the terminal portion of small intestine, opens into caecum through ileo-caecal junction.

# SMALL INTESTINE(FOWL)

- ◉ Duodenum:-

- ◉ Its length is about 22-35cm.
- ◉ It is having two parts ascending and descending part, and pancreas lies between these two parts.
- ◉ Pancreatic and bile duct open into ascending part.

- ◉ Jejunum:-

- ◉ Its length is about 88-120cm long.
- ◉ In the middle of the jejunum remnant of yolk sac present k/a **meckel's diverticulum**.

Thanks