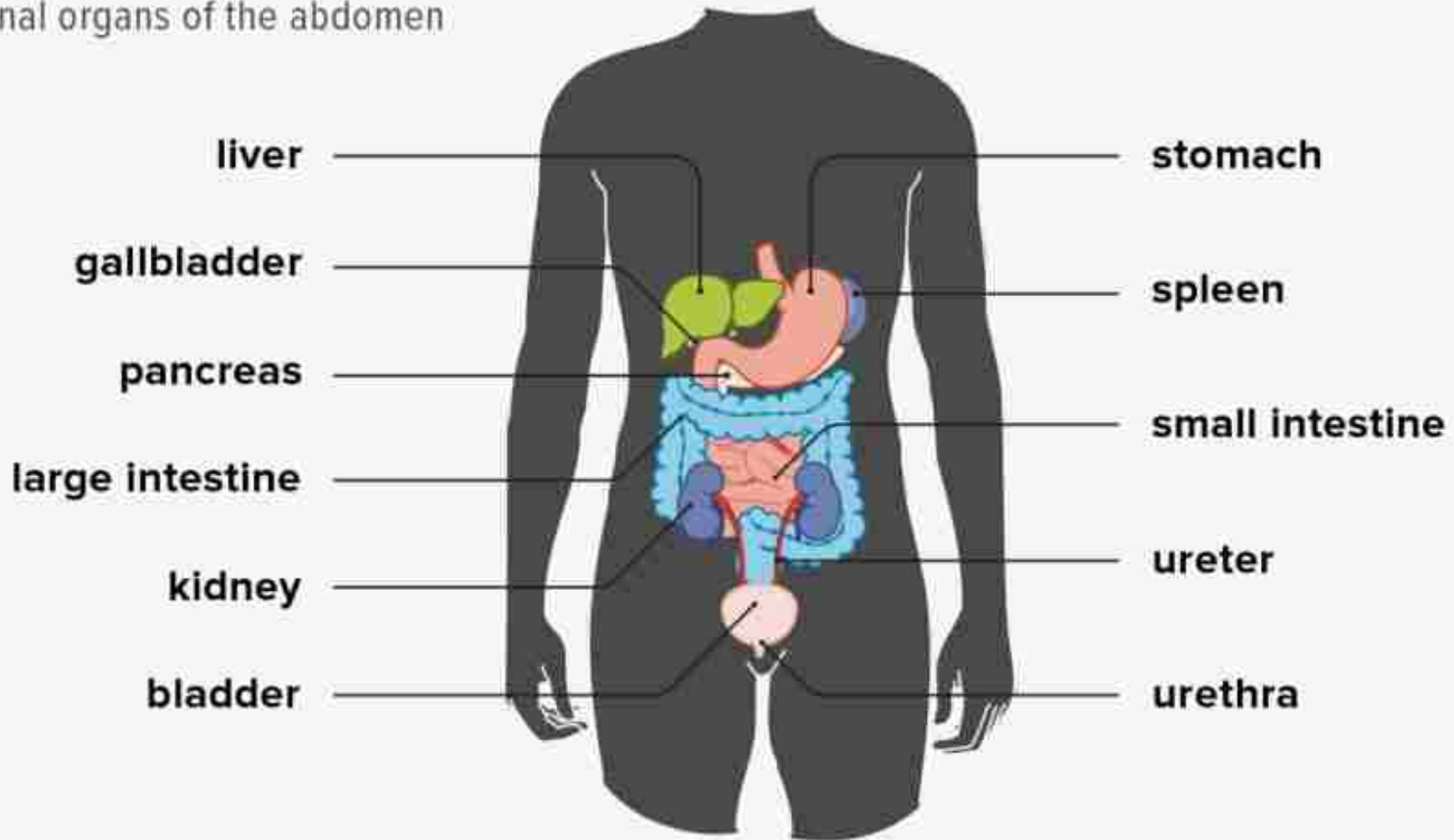


Abdominal Organs

Internal organs of the abdomen



MEDICALNEWS TODAY

* Stomach

- **definition** :- it is muscular bag and widest part of digestive tube and help in digestion of carbohydrate, protein and fat.
- **location** :- upper left part of abdomen
:- occupying - epigastric, umbilical and left hypochondriac region.
- **shape** :- In normal active person shape is "J" shaped.
- **size and capacity** :- About 25 cm long
30 ml in children
1000 ml in puberty
2000 ml or more in adult

• External features.

- 1) Two orifices
- 2) Two curvatures
- 3) Two surface
- 4) Two parts

1) Two orifices.

cardiac orifices

pyloric orifices

- Joined by lower end of oesophagus

- open into duodenum

- At level of T11
7th costal cartilage behind
2.5 cm from sternum.

- At level of L1

2) Two curvatures.

lesser curvatures

greater curvatures

- concave
- from right border of stomach
- provides attachment of lesser omentum

- convex
- left border of stomach
- provides attachment of greater omentum.

3) Two surface.

Anterior

Posterior

- face - forward and upward

- face - backward and downward.

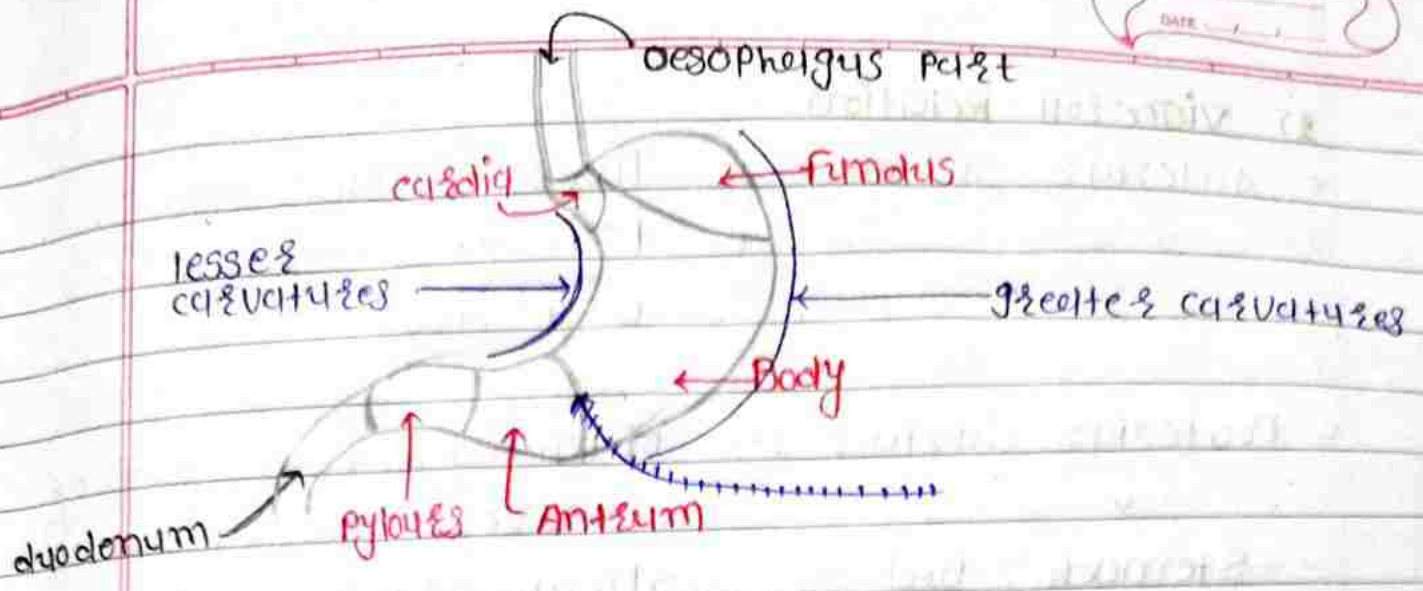
4) Two parts

cardiac

pyloric

- into - fundus and body

- into 1) pyloric antrum
- 7.5 cm long
- 2) pyloric canal
- 2.5 cm long



• Relations

- 1) Peritoneal Relations
- 2) Visceral Relations.

1) Peritoneal Relations

- At lesser curvature → layers of peritoneal lining anterior & and posterior surface meet.
 - become continuous with lesser omentum
- At greater curvature → two layers meet to form greater omentum.
 - near fundus → two layers meet to form gastrosplenic ligament.
 - near cardiac end → two layers meet to form gastrophrenic ligament.

2) Visceral Relation

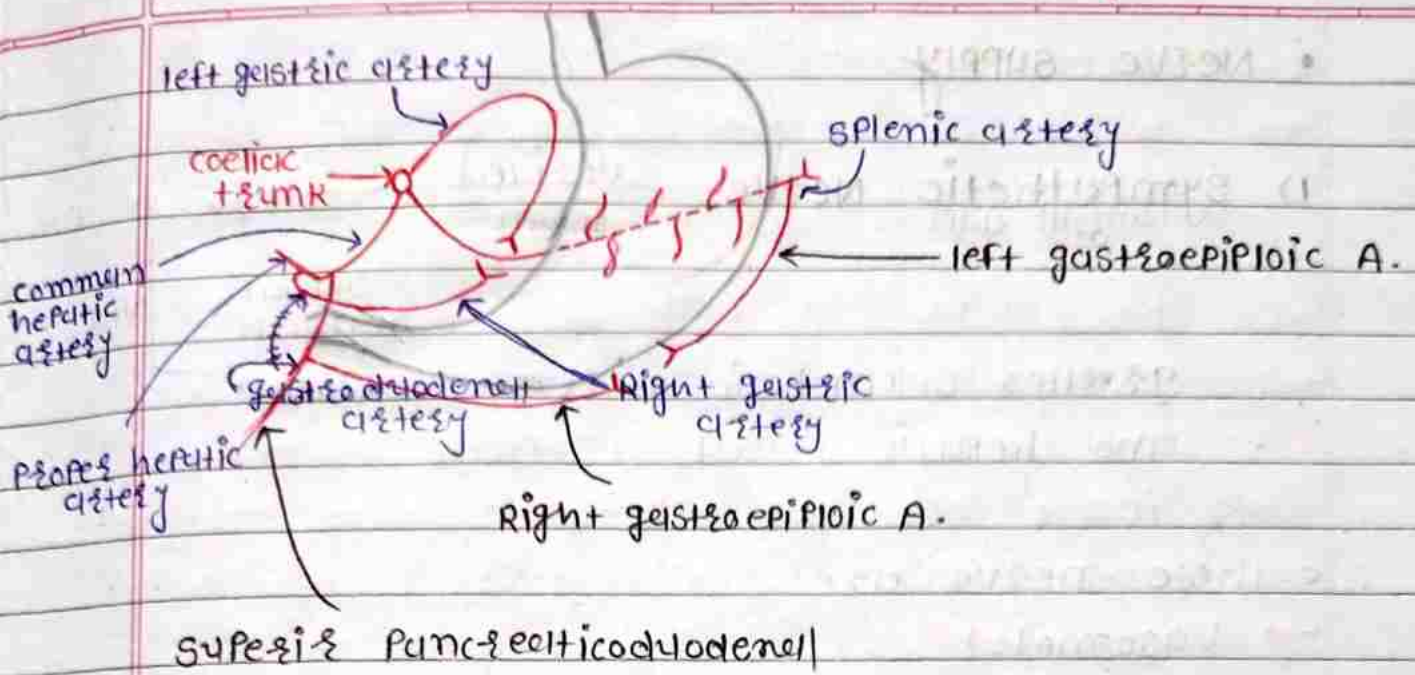
- Anterior surface :- liver, diaphragm, transverse colon, 6-9 ribs
- Posterior surface :- diaphragm, left kidney, transverse mesocolon, stomach bed, splenic artery

• Blood supply

- lesser curvature :-
 - left gastric artery $\xrightarrow{\text{branch of}}$ coeliac trunk
 - Right gastric artery \longrightarrow proper hepatic artery
- greater curvature :-
 - left gastroepiploic artery \longrightarrow splenic
 - Right gastroepiploic artery \longrightarrow gastroduodenal A.
- fundus
 - 5 to 7 short gastric arteries \longrightarrow splenic

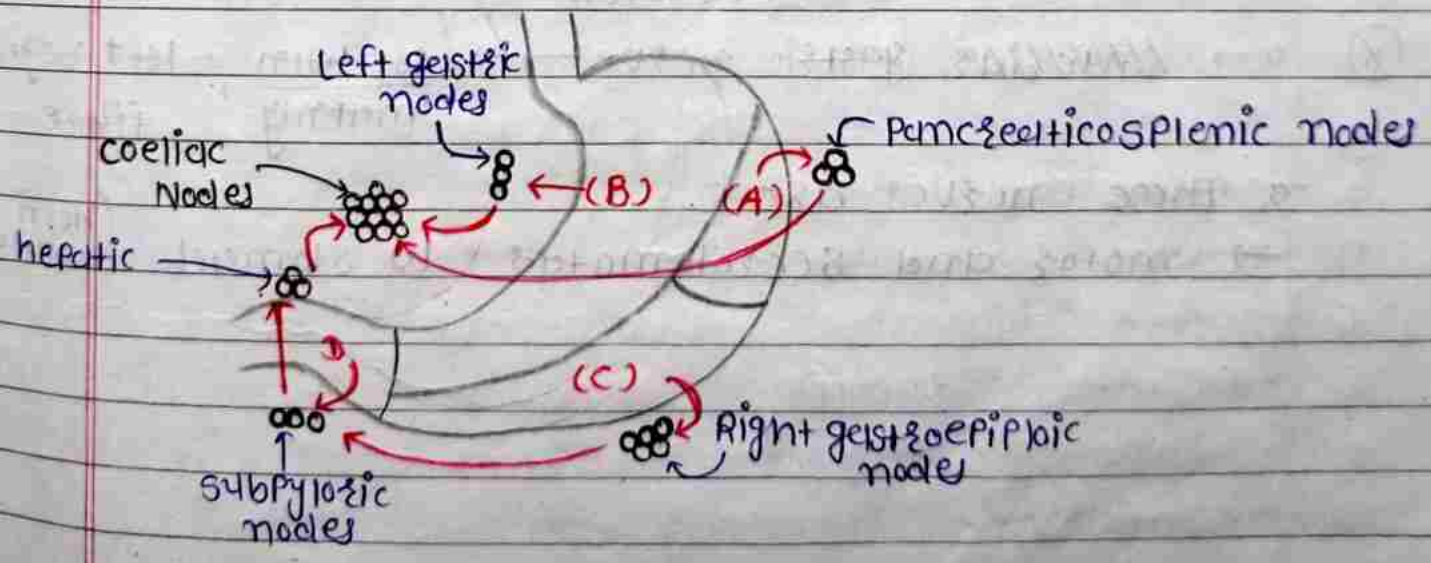
\longrightarrow Venous drainage

- Right and left gastric vein \longrightarrow portal vein
- Right gastroepiploic end \longrightarrow superior mesenteric vein
- Left gastroepiploic end \longrightarrow terminate \longrightarrow splenic (end of) and short gastric veins



• Lymphatic drainage.

- 1) a) Pancreaticosplenic nodes
- b) left gastric nodes
- c) Right gastroepiploic nodes
- d) pyloric, hepatic and left gastric nodes.



Plexus → a network of nerves or vessels in the body

• Nerve supply.

1) Sympathetic Nerve (अंतर्गुह्य) यति। derived from T6 to T10
via spinal segment
gives splanchnic nerves, coeliac and hepatic plexus.

o These nerves are

→ Vasomotor

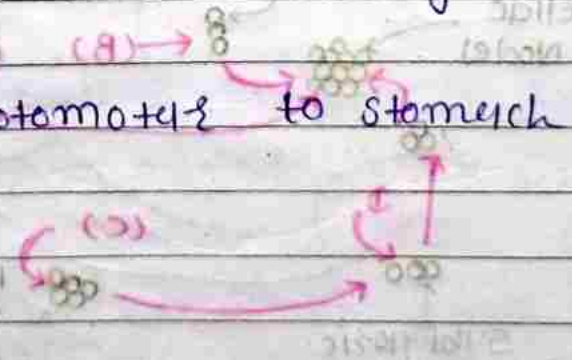
→ Chief pathway for Pain Sensations

2) Parasympathetic Nerve (परागुह्य) यति। derived from Vagi through
- oesophageal plexus
- gastric nerve (2 parts)

(X) o → ~~Anterior~~ gastric nerve → contain mainly left vagal fibres

o These nerves are

→ motor and secretomotor to stomach (HCl or gastric juice)



• Interior of Stomach (four layers)

1) Mucosal layer

→ of ^(wall) empty stomach is thrown into folds known as Gastric Rugeae

- longitudinal along the lesser curvature
- irregular
- flattened in a distended.

→ on mucosal surface, numerous small depressions are present known as Gastric Pits

- gastric glands open into these pits.

→ Part of lumen of stomach that lies along lesser curvature & has longitudinal rugeae is called Gastric canal / Magenstasse.

→ Passage of ^(out) swallowed liquids along the lesser curvature directly to the lower part before spreads other part

→ lesser curvature is maximum passage of swallowed liquids and lead to peptic ulcer.

