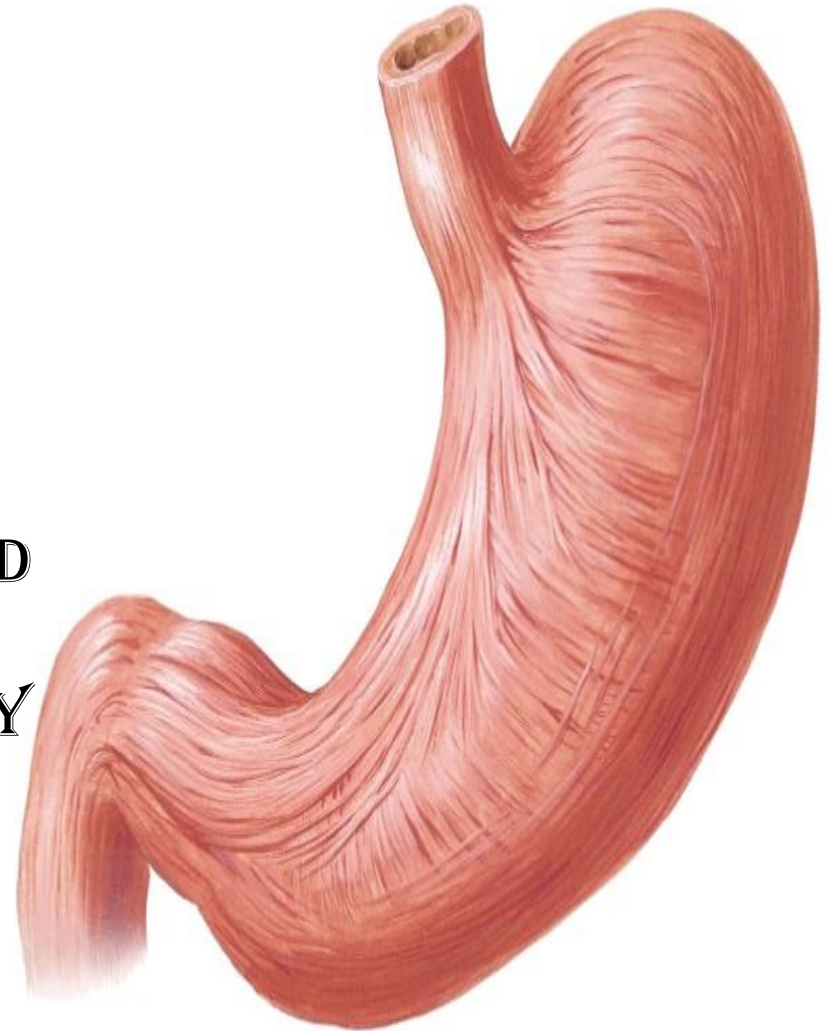


OESOPHAGUS & STOMACH

BY

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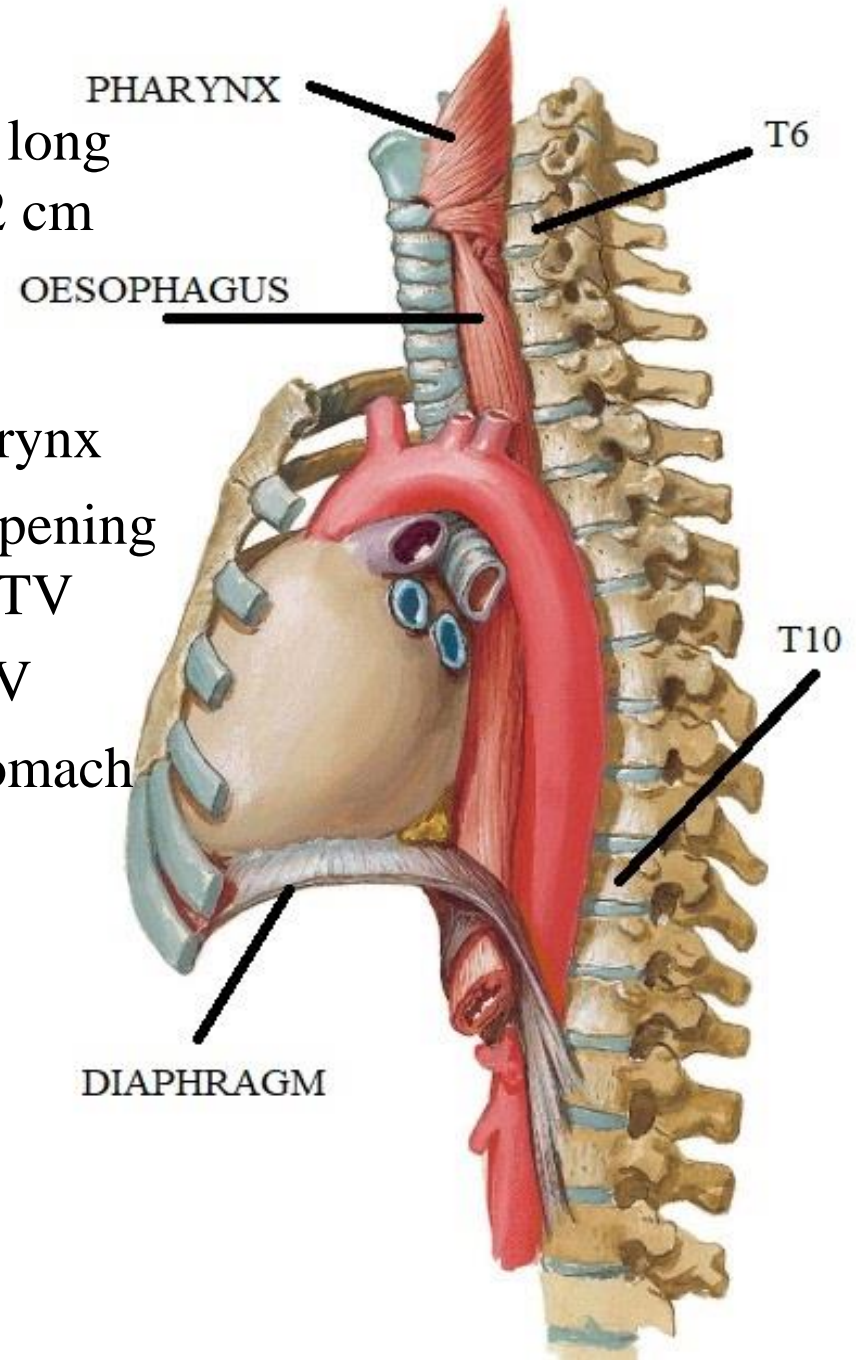
OESOPHAGUS

OESOPHAGUS

Def. It is a muscular tube 25 cm long with an average diameter 2 cm

Extent

- **Begins** at the level of 6th CV as continuation of pharynx
- Passes through oesophageal opening of diaphragm at level of 10th TV
- **Ends** at the level of the 11th TV at cardiac opening of stomach



OESOPHAGUS

Course & Relations

In the neck

course

- It begins in the midline,
- as it descends through the neck, it deviates to the left side

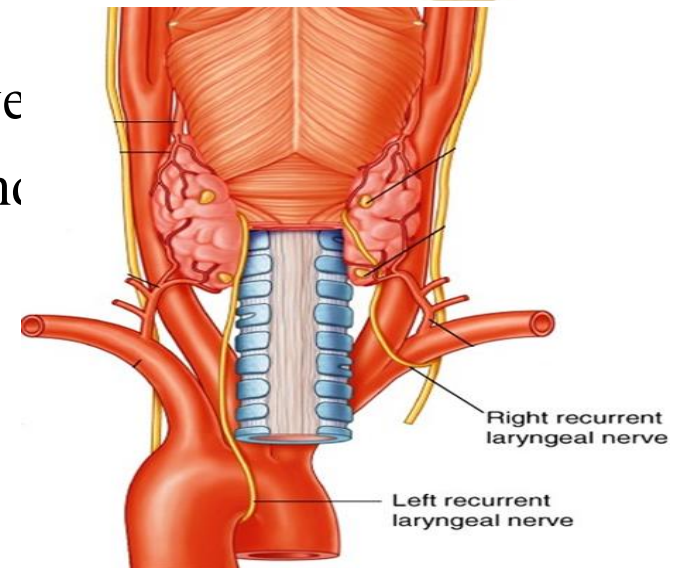
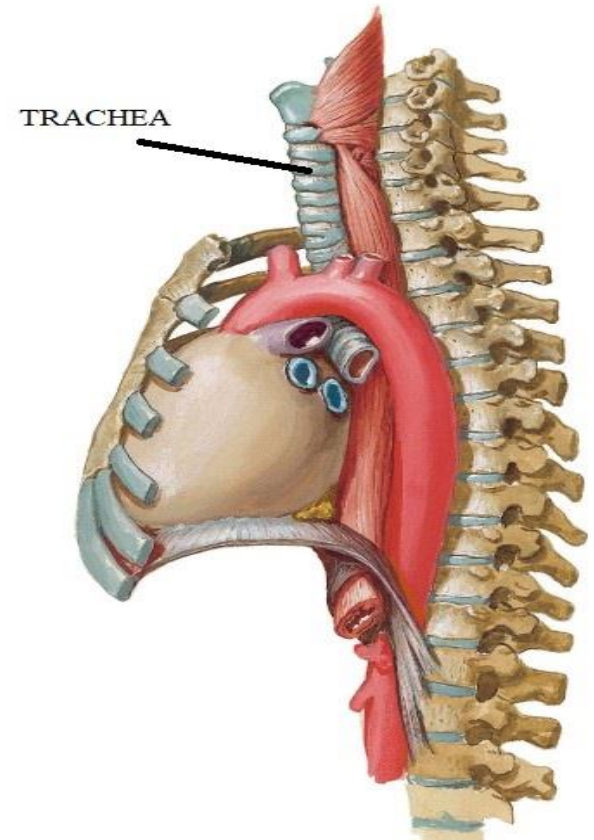
relations

Posteriorly:- the vertebral column;

Anteriorly:- the trachea

the recurrent laryngeal nerve

Laterally:- the lobes of the thyroid gland



OESOPHAGUS

Course & Relations

In the thorax

course

- it passes downward and to the left
- At the level of the sternal angle, the aortic arch pushes the esophagus to the midline

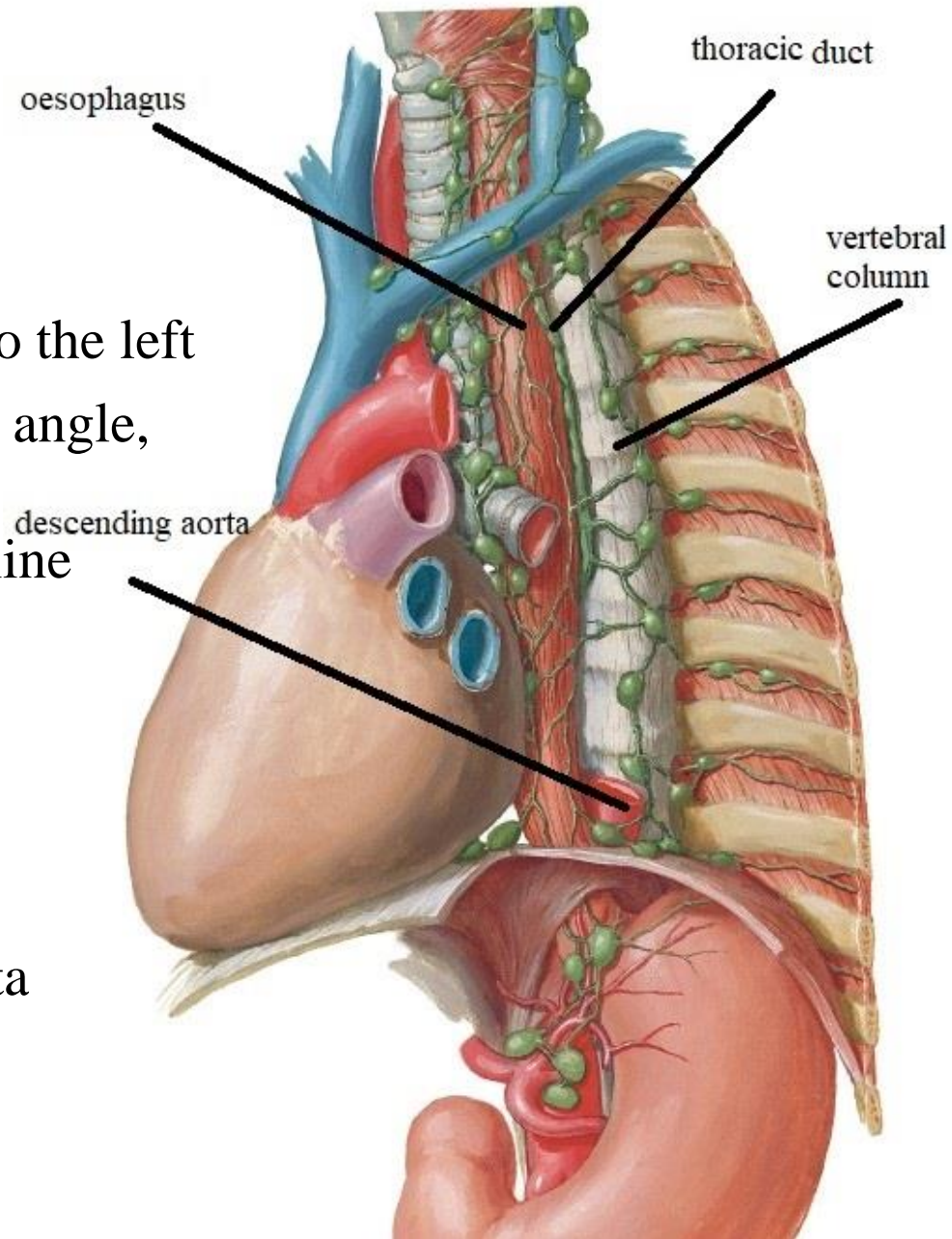
relations

Posteriorly:

the vertebral column

the thoracic duct

the descending thoracic aorta



OESOPHAGUS

Course & Relations

In the thorax

relations

Anteriorly

the trachea

the left recurrent laryngeal nerve

the left main bronchus,

the pericardium,

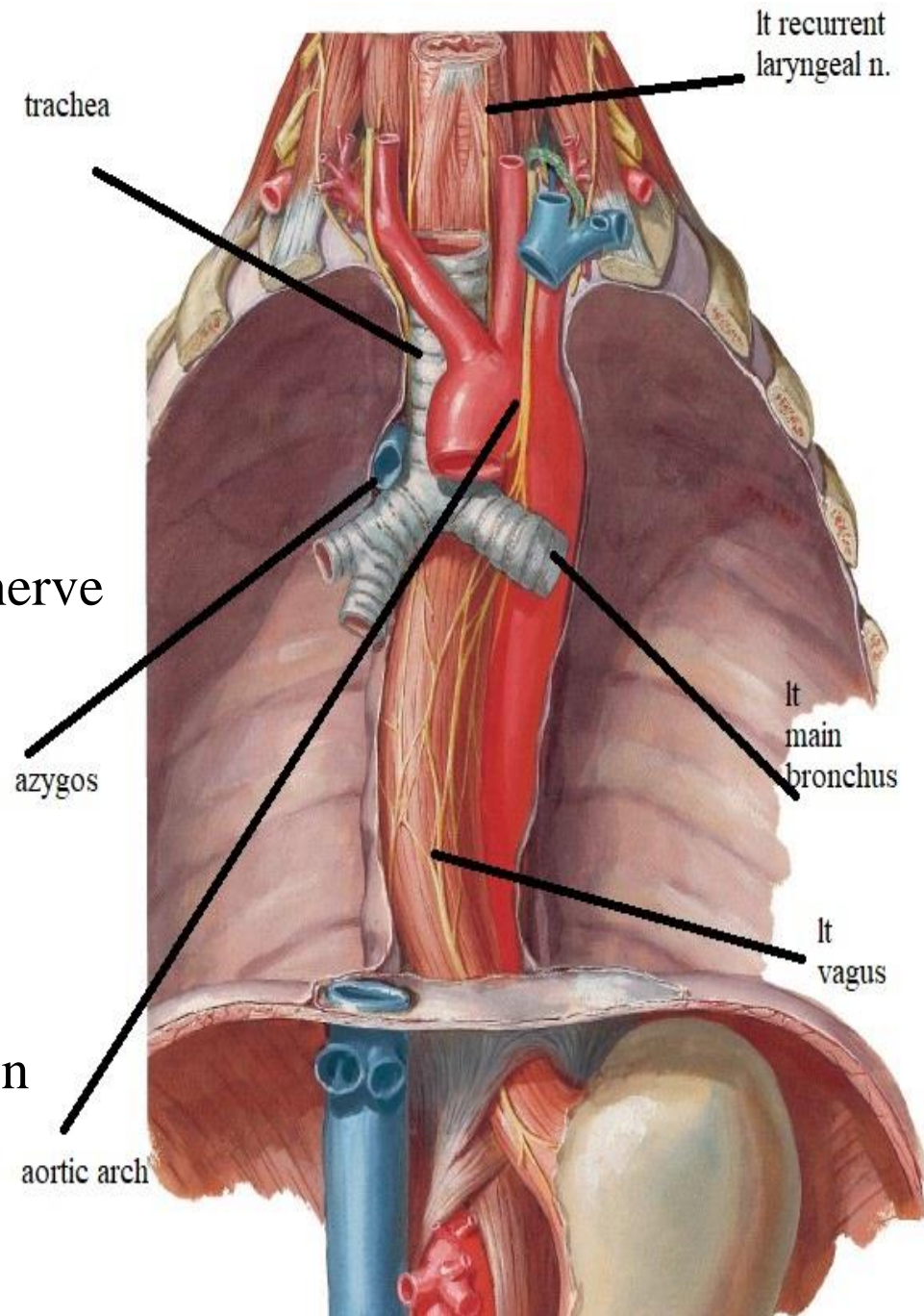
the left atrium

Right side: the pleura

the terminal part
of the azygos vein

Left side: the pleura

the aortic arch



OESOPHAGUS

Constrictions:-

1-At Pharyngo oesophageal junction

approximately 15 cm
from the incisor teeth

2-At Aortic arch

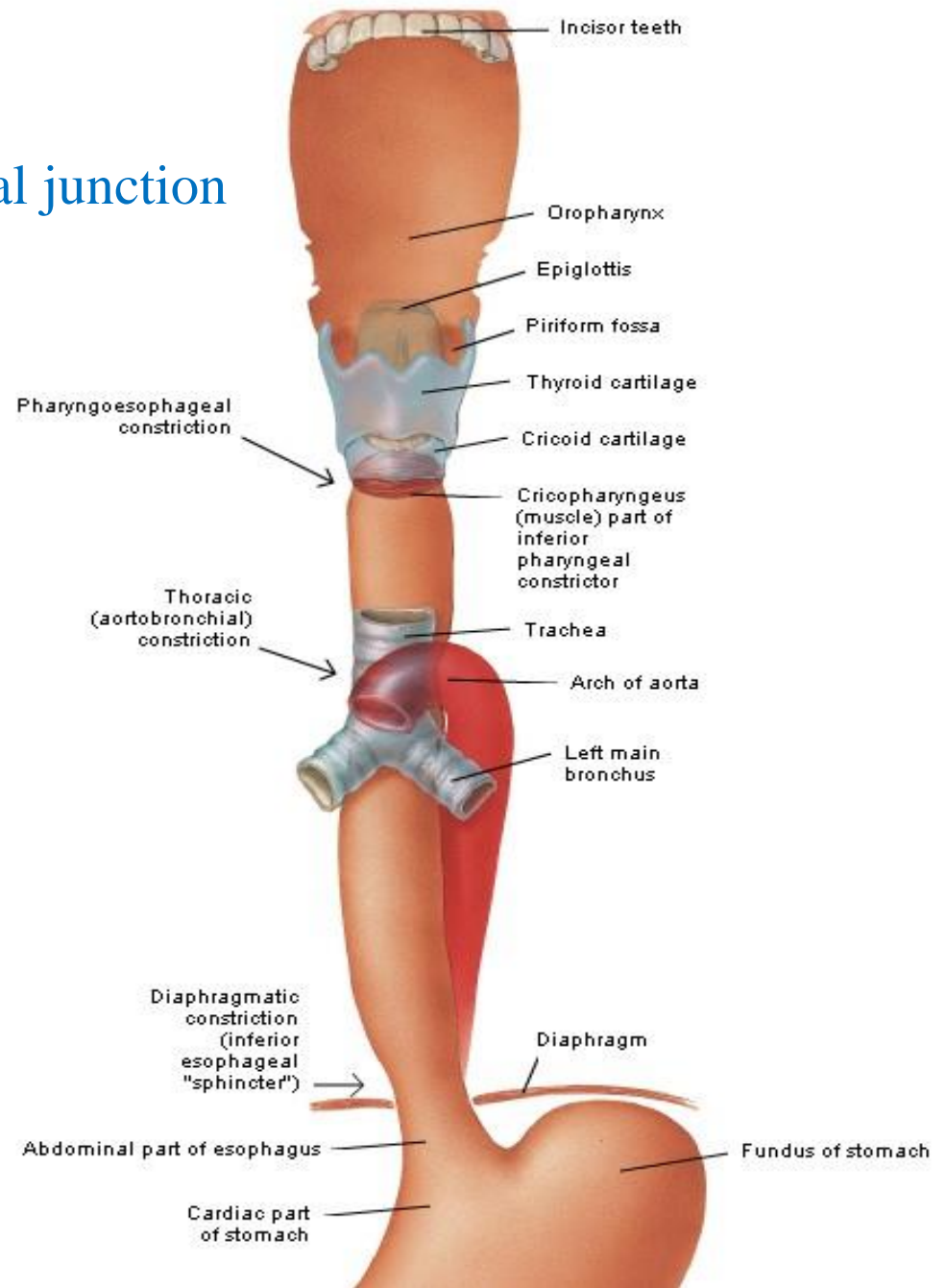
22.5 cm
from the incisor teeth

3-At left main bronchus

27.5 cm
from the incisor teeth

4-At diaphragm

40 cm
from the incisor teeth



OESOPHAGUS

A.S.:

the inferior thyroid artery
 descending thoracic aorta.&

lt. gastric artery

V.D.:-

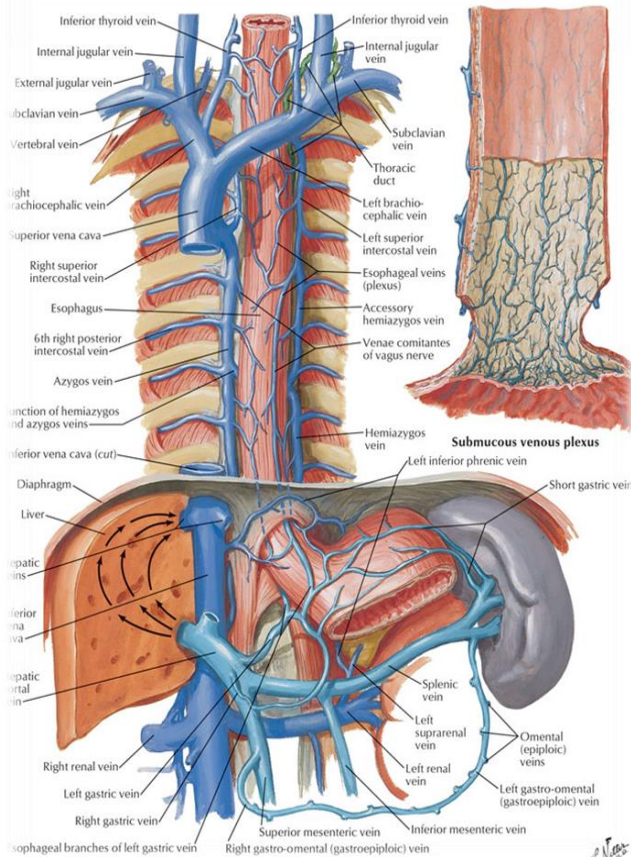
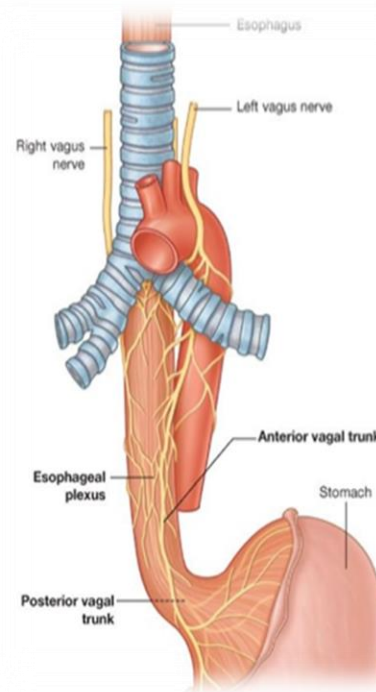
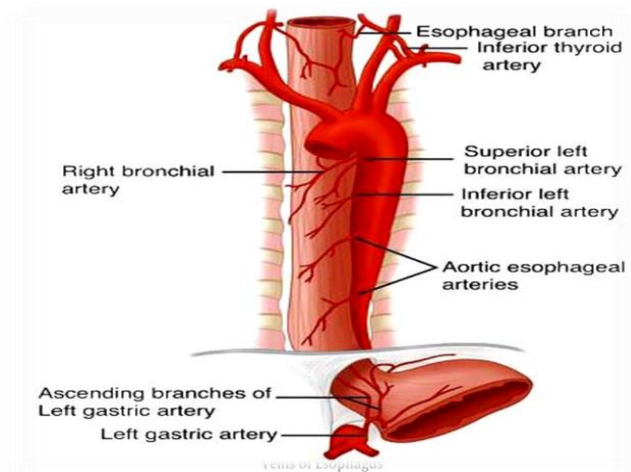
Inferior thyroid vein
 azygos v. &

lt. gastric vein

L.D.:-

Deep cervical L.N.
 mediastinal L.Ns &
 coeliac L.Ns

N.S.:- parasympathetic and sympathetic
 fibers via the vagi and
 sympathetic trunks that
 form oesophageal plexus





STOMACH

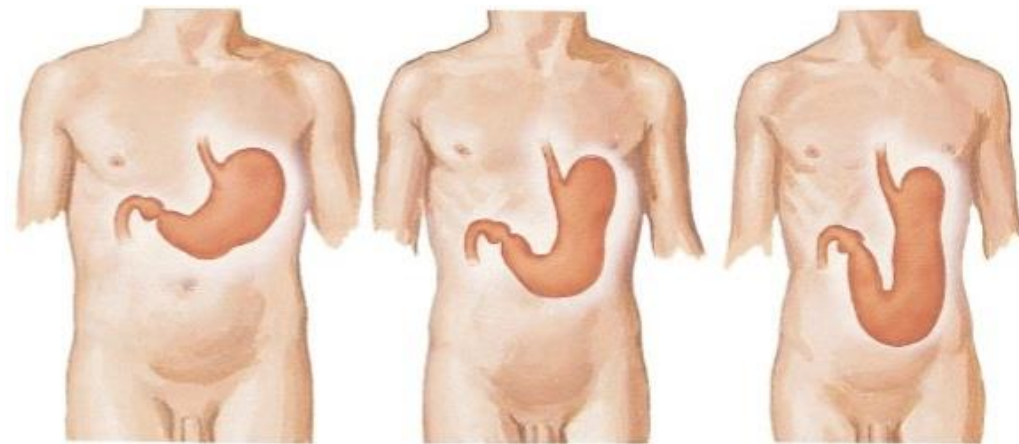
STOMACH

Position:

left hypochondriac
epigastric &
umbilical regions

Shape:

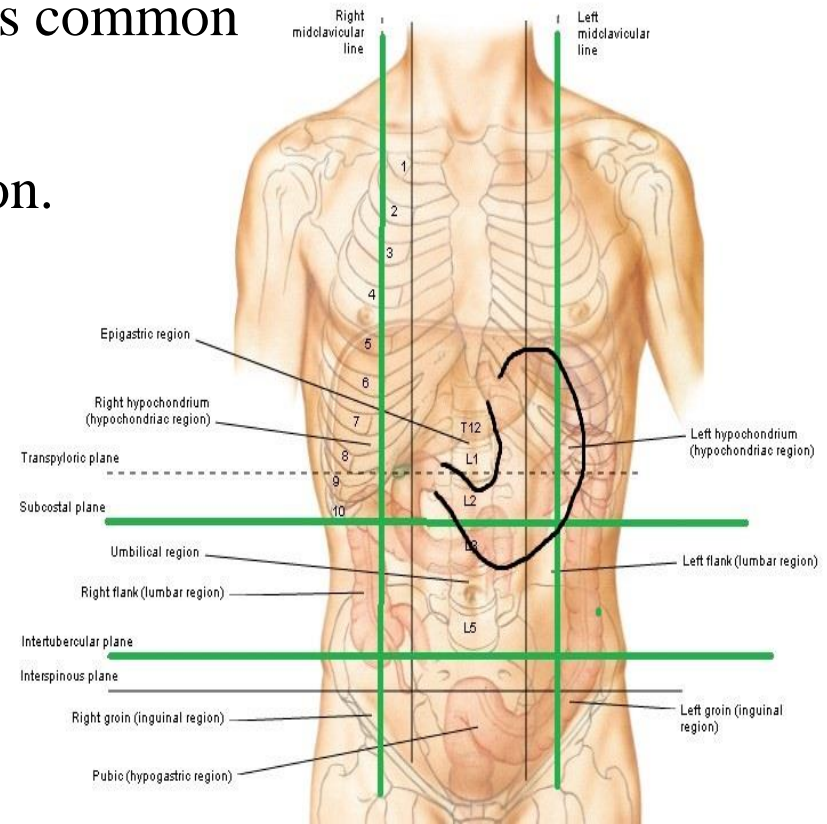
- 1- J shaped (vertical): more common
 - 2- stear (ox) horn (horizontal): less common
 - 3- intermediate
- it is more vertical in tall thin person.



STEER HORN

INTERMEDIATE

J-SHAPE



STOMACH

External features:

2 orifices:

Pyloric orifice

- continue with the duodenum
- surface anatomy:-

L1 (transpyloric plane)

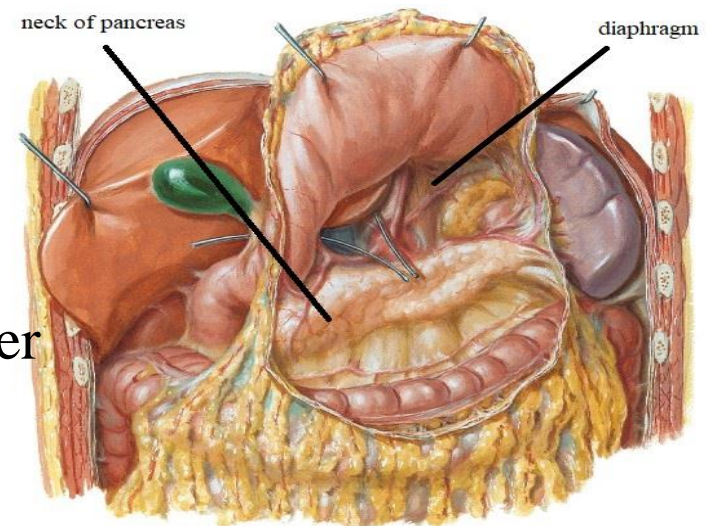
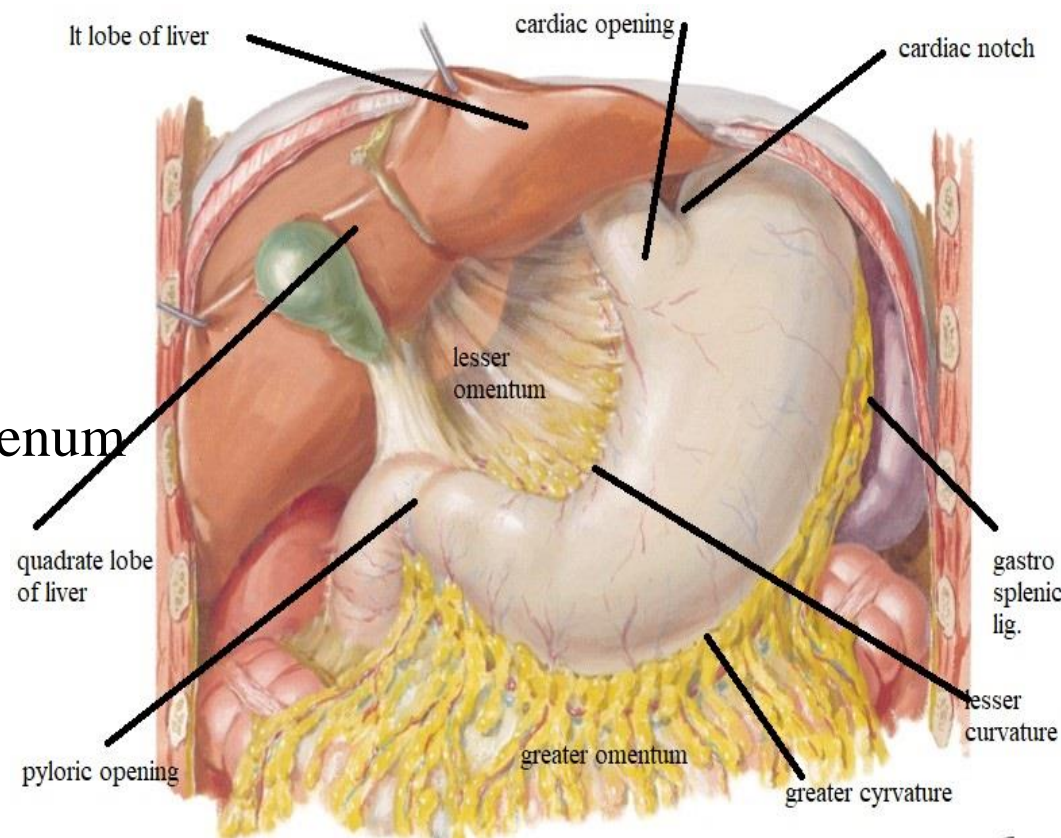
1/2 inch to Rt of midline

- Has a true sphincter
(pyloric sphincter)

that indicated on surface by:

- its thickening.
- pyloric constriction(circular groove)
- relation :-Ant. quadrated lobe of liver

Post.: neck of pancreas



STOMACH

External features:

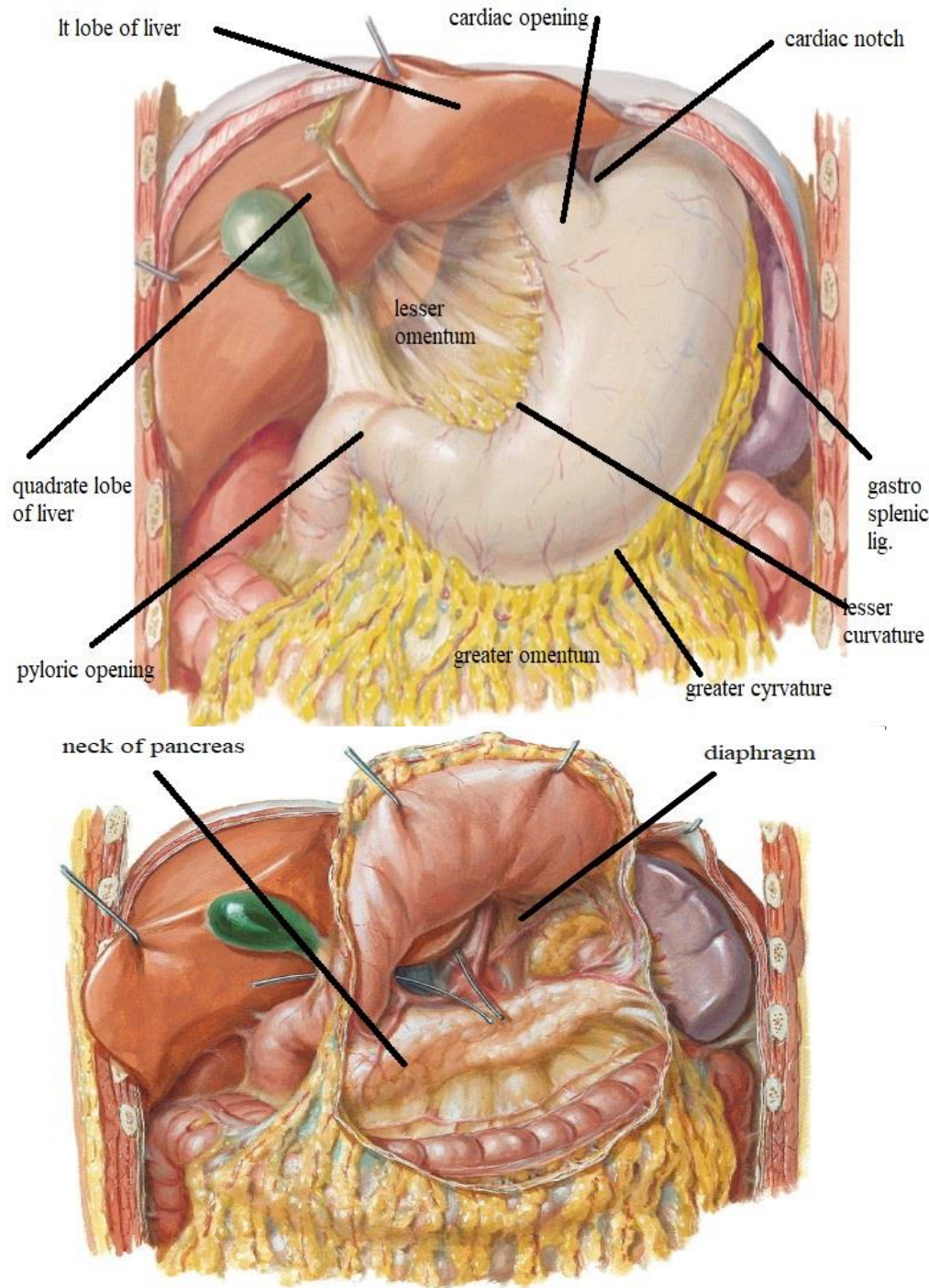
2 orifices:

Cardiac orifice

- receive oesophagus
- surface anatomy:
(T11v) 7th costal cartilage
1 inch to left of midline
- Has NO true sphincter:
but cardiac notch
- relation :-

Ant.:- - ant. gastric n.

Post.:- - post. gastric n.



STOMACH

External features:

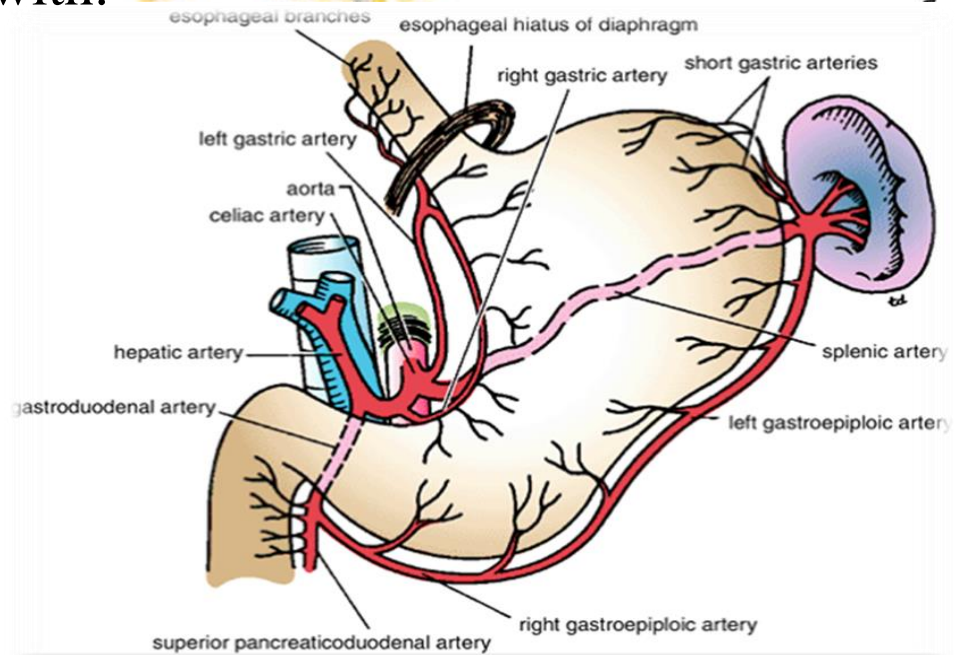
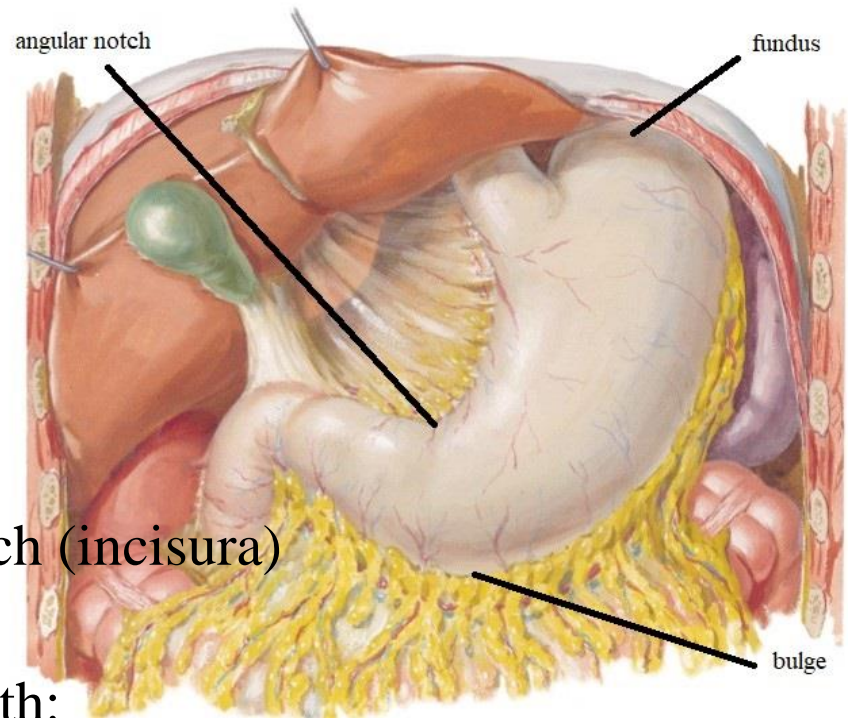
2 borders:

Rt. (lesser curvature)

- concave:
descends vertically then passes to Rt. at angular notch (incisura)
- Relations
attach to lesser omentum with:

Rt. & Lt. gastric vessels

() 2 layer of omentum



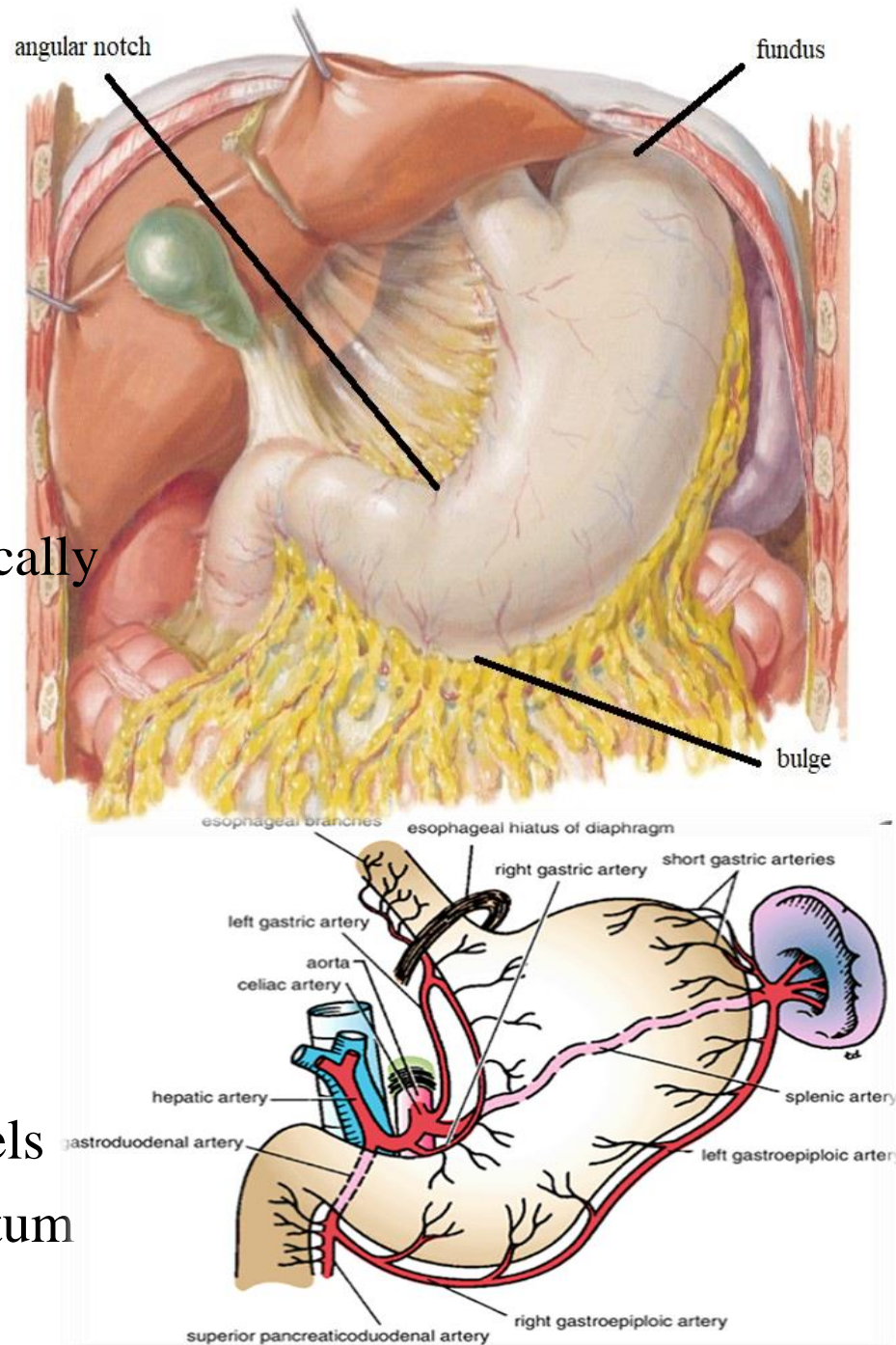
STOMACH

External features:

2 borders:

Lt (greater curvature)

- convex:
arches upwards forming fundus then descends vertically then passes to Rt. at bulge below angular notch
- Relations:- attach to
 - gastrophrenic lig.
 - gastrosplenic lig.
 - greater omentum with:
Lt & Rt. gastroepiploic vessels
() 2 ant. layers of omentum



STOMACH

External features:

2 surfaces:

anterior (antero superior)

Relations

Lt part:

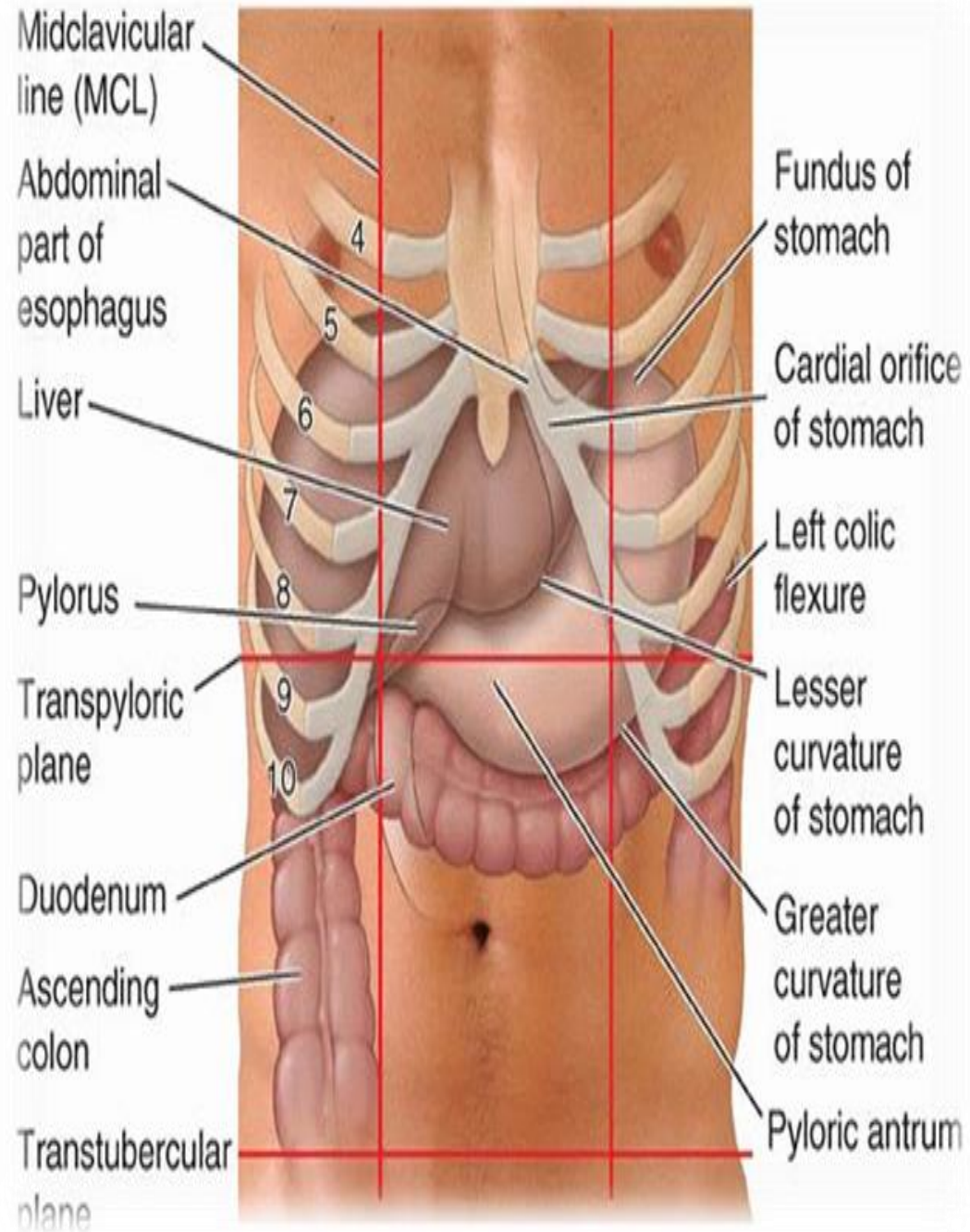
- diaphragm.
- Lt lung & pleura
- Lt 7, 8 ribs & costal cartilages.

Rt part:

Lt lobe of liver.

Intermediate part:

ant. abdominal wall



STOMACH

External features:

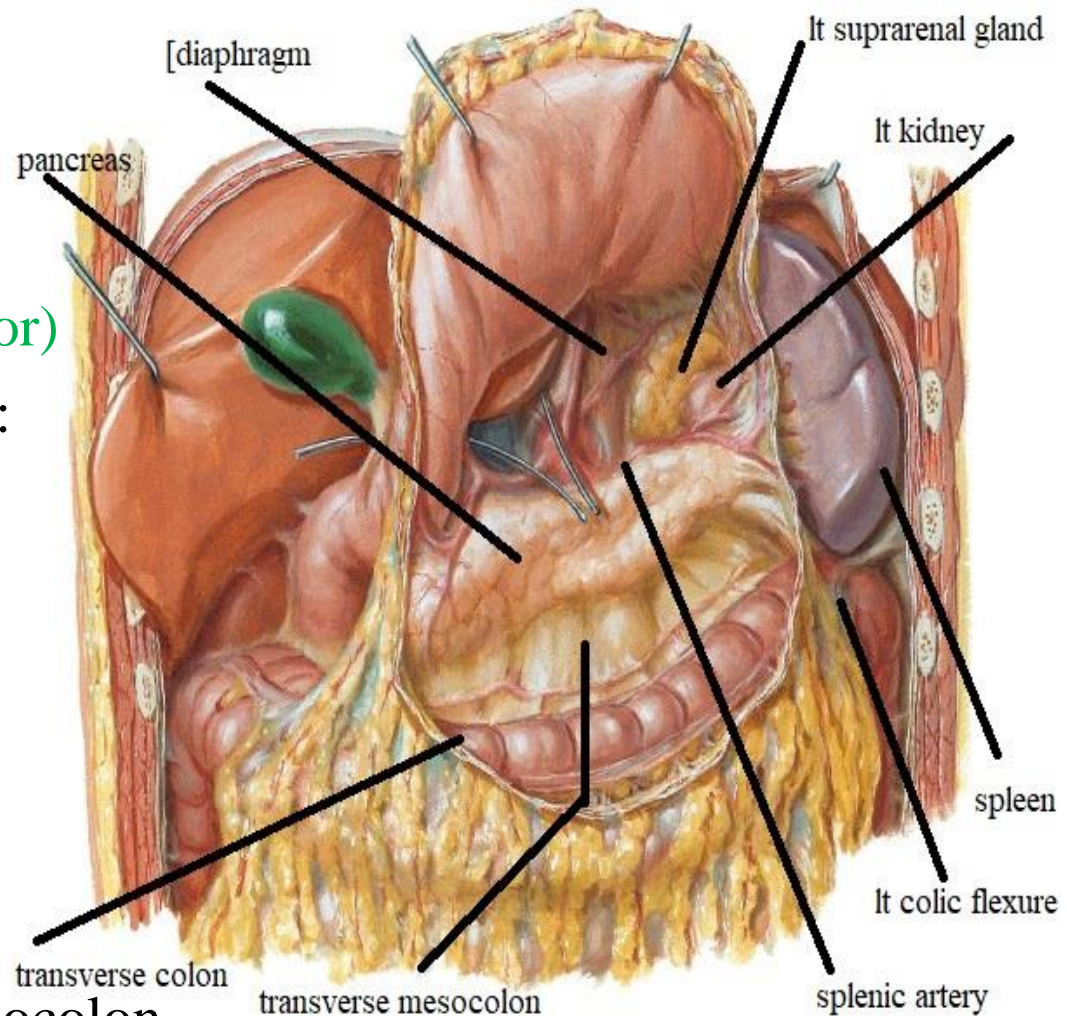
2 surfaces:

Posterior (postero inferior)

Relations:-stomach bed:

- Lt crus of diaphragm.
- spleen.
- Lt kidney & suprarenal gland.
- body of pancreas & splenic art.
- transverse colon & mesocolon.
- Lt colic flexure.

& all these structures are separated from stomach by lesser sac except spleen is separated from it by greater sac.



STOMACH

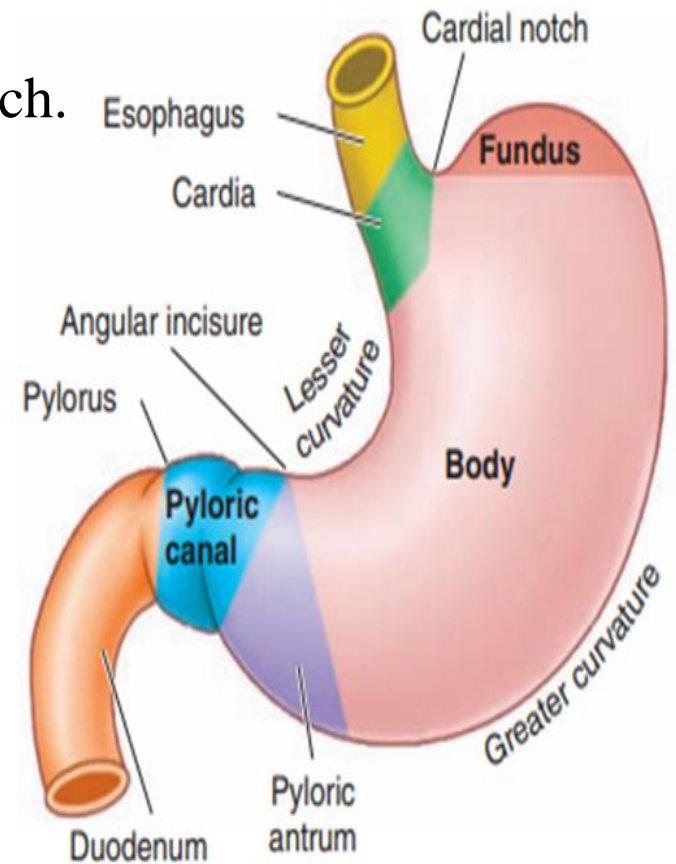
PARTS

1-fundus: above cardiac end
Lies in Lt midclavicular line
in Lt 5th intercostal space.

2-body: () cardiac end & angular notch.

3-pyloric part: below angular notch
& is divided into 3 parts.

- pyloric antrum :
dilated part below body
- Pyloric canal.
- pyloric orifice with
pyloric sphincter.

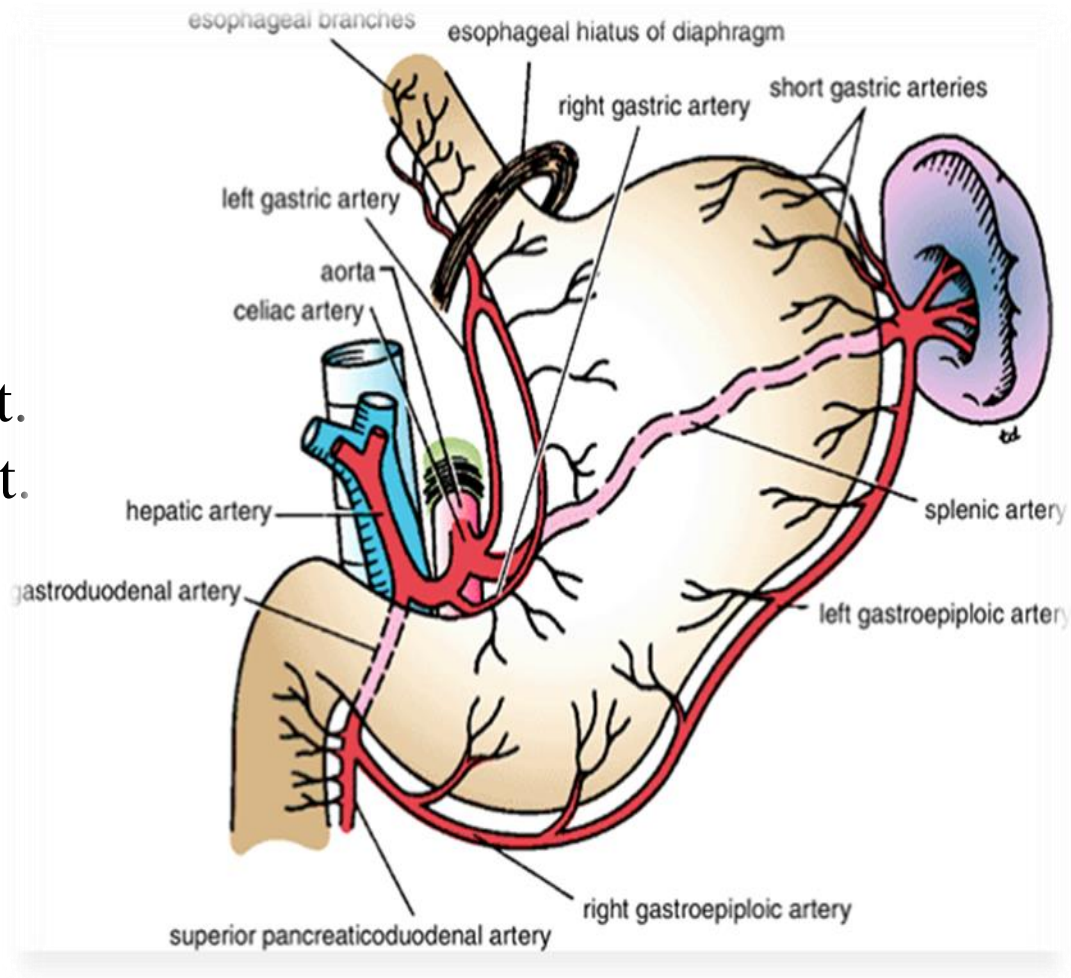


(A) Anterior view

STOMACH

arterial supply:

- 1-Lt gastric art.
- 2-Rt gastric art.
- 3-Lt gastro-epiploic art.
- 4-Rt gastro-epiploic art.
- 5-Short gastric art.



STOMACH

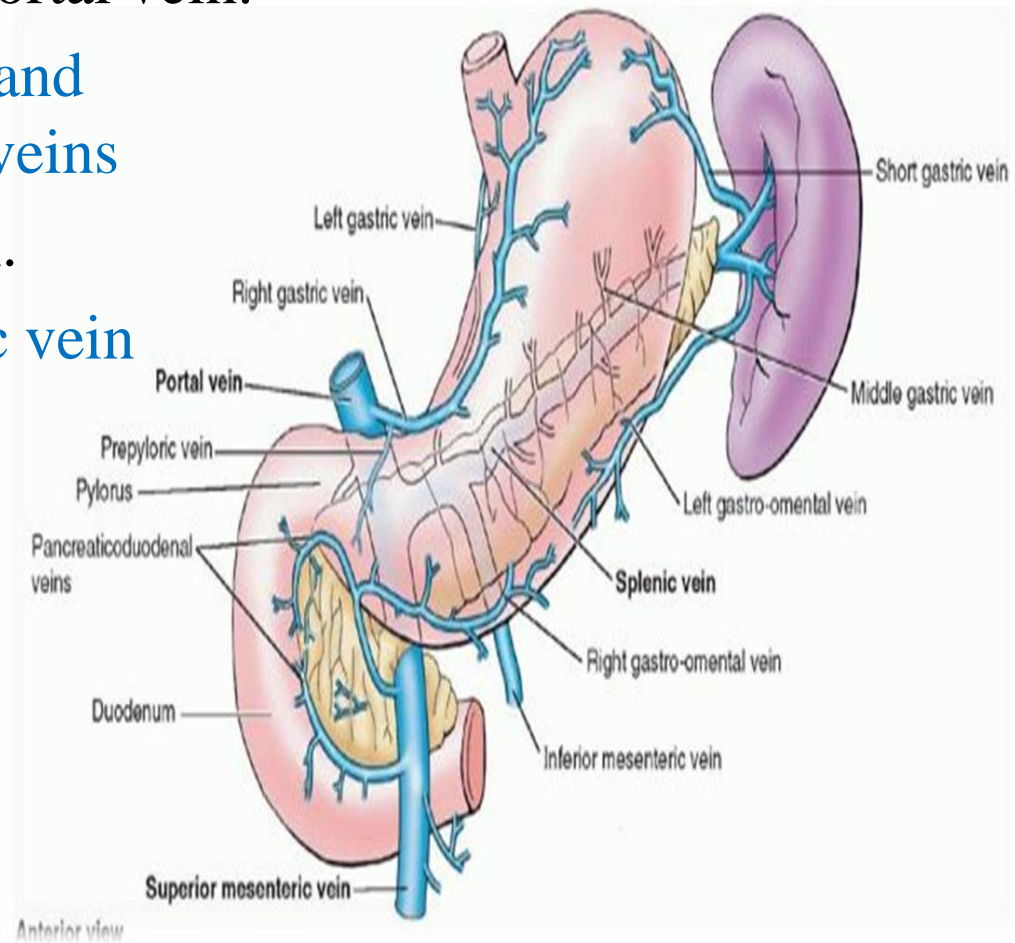
Venous drainage:

The veins drain into the portal circulation.

The left and right gastric veins drain directly into the portal vein.

The short gastric veins and the left gastroepiploic veins end in the splenic vein.

The right gastroepiploic vein ends in the superior mesenteric vein.

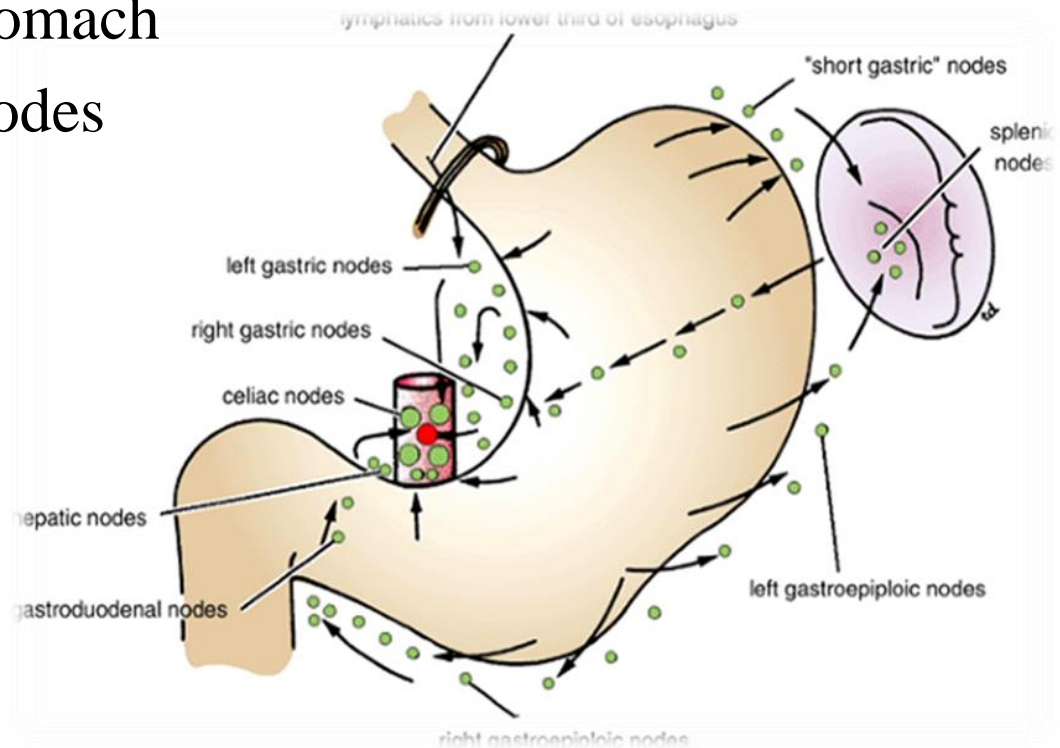


STOMACH

lymph drainage:

The lymph vessels follow the arteries into the left and right gastric nodes, the left and right gastroepiploic nodes, and the short gastric nodes.

All lymph from the stomach passes to the celiac nodes

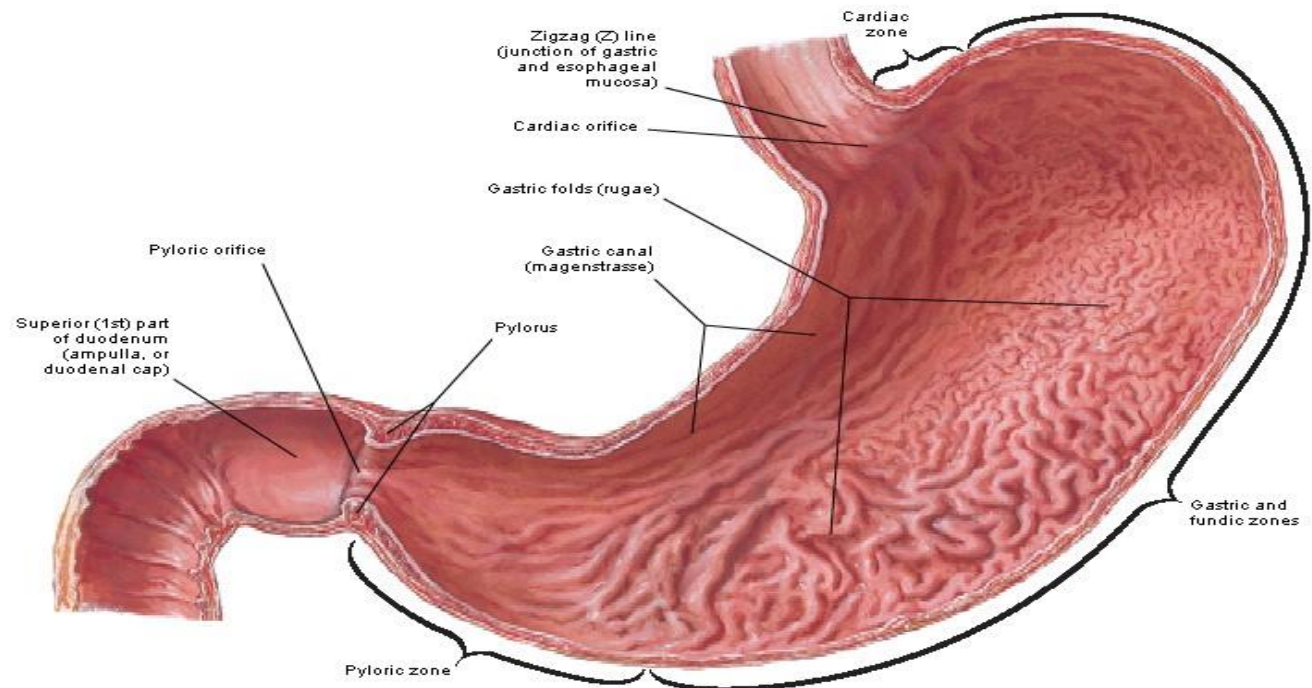


STOMACH

Mucosa (interior):

there are longitudinal folds called rugae that disappear in full stomach

2 of them are present along lesser curvature forming gastric canal. the liquids and food eaten at beginning of the meal run along the gastric canal to pyloric portion



STOMACH

nerve supply of stomach:

sympathetic:

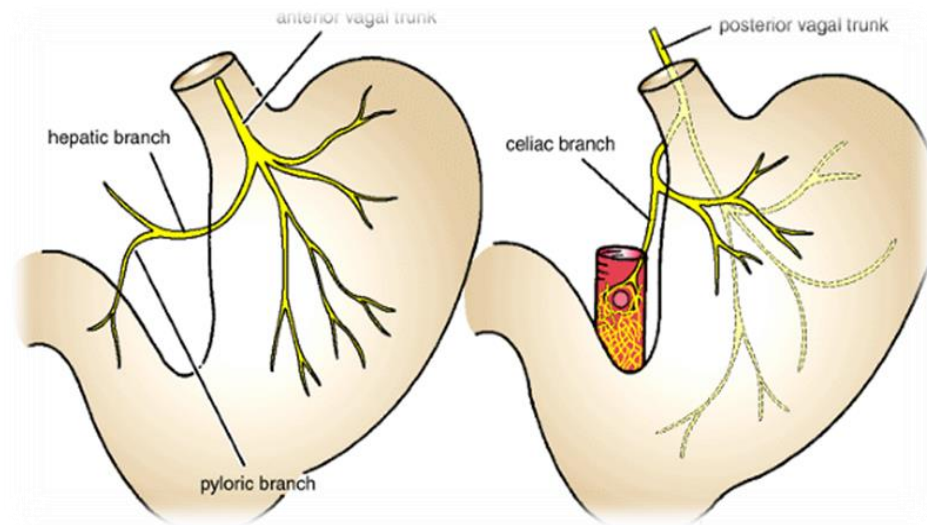
- from T6- 10 segments of spinal cord

parasympathetic:

- from 2 vagi that continue as 2 gastric nerves.

applied anatomy:

- gastric ulcer is common in lesser curvature at pyloric part due to less blood supply





THANQ