

# Pancreas

Before going through the contents, make sure you check this [CORRECTION FILE](#) first

# Description & location

## Description:

-It is an elongated soft pinkish structure

-length: 6-10 inch

-weight: 60-100 gm

## Lobulated, **WHY?**

Because it is surrounded by a fibrous tissue capsule from which septa pass into the gland and divide it into lobes. The lobes are divided into lobules.

Surface is **not** smooth because its lobulated

## LOCATION

Retro-Peritoneal  
(fixed)

on the posterior abdominal wall in the: **Epigastrium & Left upper quadrant of the abdomen.**

It extends in a transverse oblique direction at the transpyloric (at L1) plane

Extending from the concavity of the duodenum on the right to the spleen on the left.

# PARTS OF PANCREAS

## HEAD

- It is disc shaped
- Lies within the concavity of the duodenum
- Related to the 2<sup>nd</sup> and 3<sup>rd</sup> portions of the duodenum.



## THE HEAD

On the right, it emerges into the neck.

On the left, it includes **Uncinate Process** (an extension of the lower part of the head behind the superior mesenteric vessels)

## NECK

- It is the constricted portion connecting the head & body of pancreas
- Its **antero-superior surface** supports the **pylorus of the stomach**
- The **superior mesenteric vessels** emerge from its inferior border

## BODY

- It runs upward and to the left.
- It is triangular in cross section.
- The **Splenic Artery** runs to the left along the upper border of the pancreas.



The **Splenic Vein** is embedded in its post. Surface

## Tail

- A narrow, short segment
- Ends within the splenic hilum
- May be injured during **Splenectomy**
- Lies in the **Splenicorenal ligament**



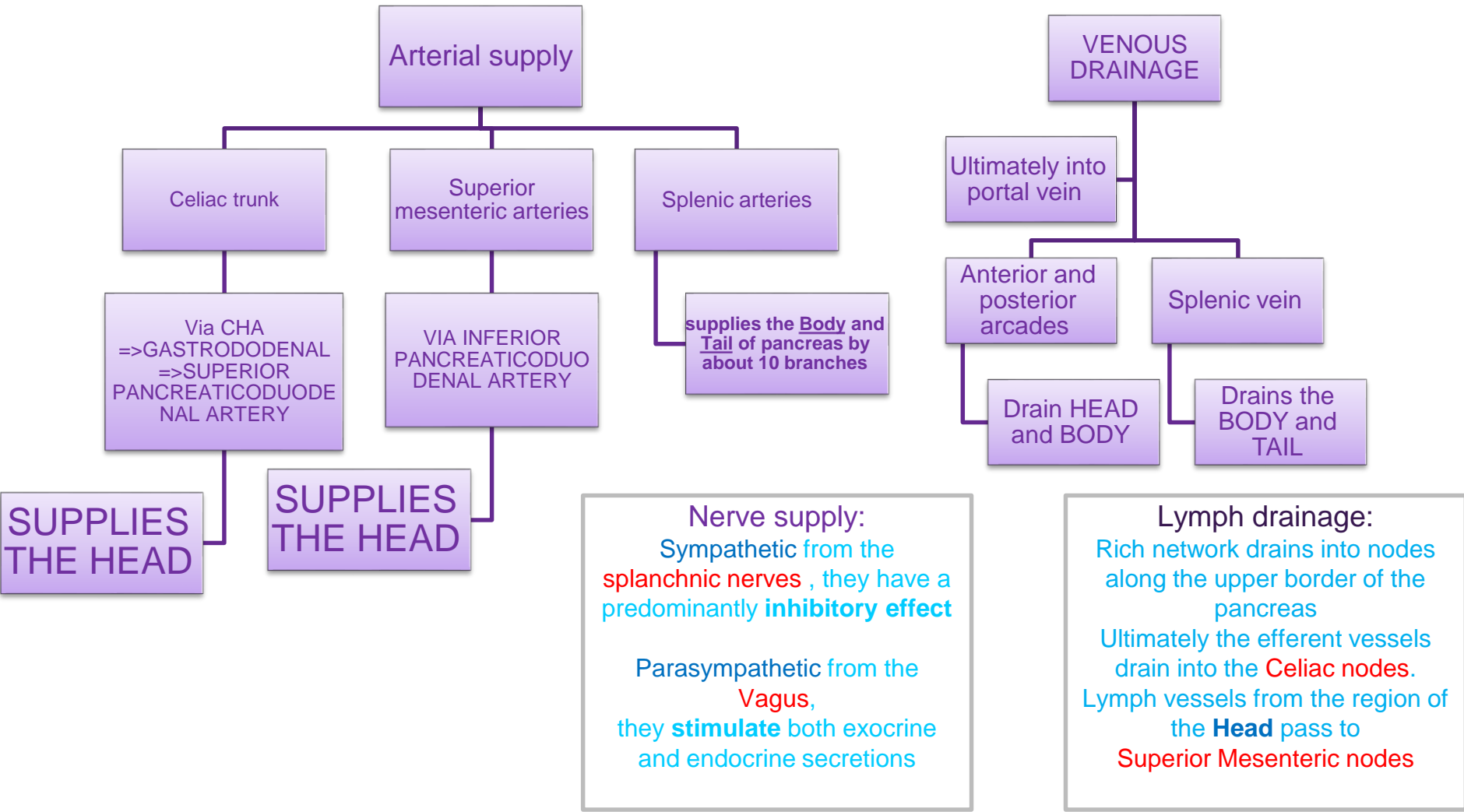
**Anteriorly, related to: splenic flexure of colon**

Because of pancreas oblique direction the tail is higher than the head (at

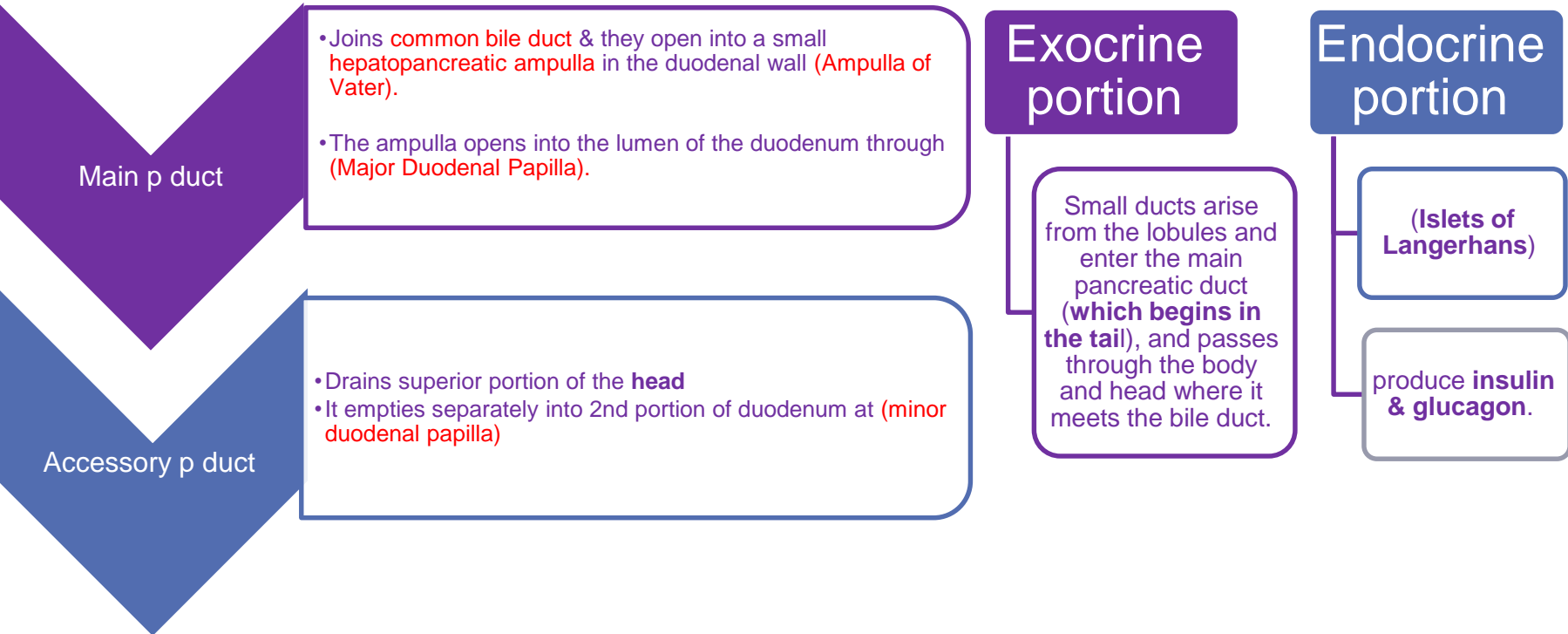
# Relations of pancreas parts

	Structures anterior	Structures posterior
Head		(1) Bile Duct runs downwards and may be embedded in it. (2) IVC runs upwards.
neck		<ul style="list-style-type: none"><li>• Aorta</li><li>• Origin of Superior Mesenteric artery</li><li>• the confluence of the Portal Vein</li></ul>
body		Left Psoas muscle Left Adrenal gland Left Renal vessels Upper 1/3rd of Left kidney Hilum of the spleen.
tail	Stomach separated from by lesser sac Transverse colon & transverse mesocolon	

# Blood supply, venous drainage & nerves



# Pancreatic ducts + functions of pancreas



# Additional notes (by Dr.Jamila):

- If pancreas becomes solid => it is either an inflammation or a tumor.
- Cancer of head of pancreas can lead to obstructive jaundice.(compression applied on Bile duct)
- L1 is the origin of superior mesenteric artery
- L3 is the origin of inferior mesenteric artery
- Injury to tail of pancreas with nephrectomy of left kidney can lead to acute pancreatitis
- Metastasis of cancer from tail to liver from splenic vein draining into portal vein

# MCQs

1-The following statements concerning the pancreas are correct except which?

- A-The pancreas receives part of arterial supply from the splenic artery.
- B-The main pancreatic duct opens into the third part of the duodenum.
- C-The uncinate process of the pancreas projects from the head of the pancreas.
- D-The bile duct lies posterior to the head of pancreas
- E-The transverse mesocolon is attached to the anterior border of the pancreas.

2-The transpyloric plane passes through the:

- A-Upper part of vertebra L1
- B-Lower part of vertebra L1
- C-Disc between vertebra L1 and L2
- D-Upper part of vertebra L2
- E-Lower part of vertebra L2

3-Which of the following structures lies posterior to Body of pancreas:

- A.The upper 1\3<sup>rd</sup> of right kidney.
- B.The confluence of the portal vein.
- C.The aorta.
- D.The upper 1\3<sup>rd</sup> of left kidney.

4-Which part of the pancreas may be injured in a splenectomy procedure?

- A.Body
- B.Head
- C.Tail
- D.Neck



# MCQs

5-The uncinat process is an extension of:

- A.The tail
- B.The lower part of head
- C.The neck
- D.The upper border of the body

6-The inferior pancreaticoduodenal artery is a branch of:

- A.The splenic artery
- B.The common hepatic artery
- C.The superior mesenteric artery
- D.The gastroduodenal artery

# THANK YOU FOR CHECKING OUR WORK GOOD LUCK DOCTORS

Key answers:

- 1.B
- 2.B
- 3.D
- 4.C
- 5.B
- 6.D

Wise old owl  
lived in an oak;  
The more he saw  
the less he spoke;  
The less he spoke  
the more he  
heard: Why can't  
we all be like  
that bird.

- Edward Hersey Richards

QuotePixel.com

**Done by:**  
حنان خشيم

For any question, correction or suggestion, don't hesitate to contact us on:  
[anatomyteam434@gmail.com](mailto:anatomyteam434@gmail.com)