ILIAC VEINS

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I- INTRODUCTION:

- The common iliac veins are two in number and are branches of the inferior vena cava.
- They arise from the union of the external iliac vein and the internal iliac vein, draining the pelvis and the lower limb.



II- COMMON ILIAC VEINS

- They originate from the union of the external iliac vein and the internal iliac vein at the level of the sacroiliac joint.
- They terminate by merging with each other on the right side of the L5 lumbar vertebra to form the inferior vena cava (IVC).



RIGHT ILIAC VEIN

- It is located behind its corresponding artery. The artery becomes lateral to its termination.
- It lies posterior to the obturator nerve.
- It receives the right ascending lumbar vein.

LEFT ILIAC VEIN

- It is located behind its corresponding artery, obliquely directed to the left and below the artery.
- It lies,
 - > Anterioly, to:
- ✓ The sigmoid mesocolon,
- $\checkmark\,$ The superior mesenteric vessels.

- > Laterally :
- \checkmark the gonadal vessels,
- \checkmark The obturator nerve.
 - > Posteriorly :
- ✓ L5 vertebral body.





Sigmoid mesocolon

III- EXTERNAL ILIAC VEINS:

Origin and termination

- It is a continuation of the femoral vein below the inguinal ligament.
- It ends by joining the internal iliac vein to form the common iliac vein.

Path and relations:

- The external iliac artery lies laterally to the origin of the external iliac vein.
- It then tends to become slightly superior towards its termination.
- In males, the vas deferens crosses the vein at its origin.
- The medial and intermediate iliac nodes are located along its inferior and medial borders.

Tributaries of the external iliac vein:

- The inferior epigastric veins
- \circ The deep circumflex iliac veins





IV- INTERNAL ILIAC VEIN

- Length : 4 cm
- Diameter : 15 mm
- It originates at the level of the sacroiliac joint
- It then joins the external iliac vein to form the common iliac vein.

> Posteriorly :

✓ Piriformis muscle,

✓ Sacroiliac joint.

> Anteriorly

- ✓ The right vein is in relation to its homonymous artery, which separates it from the ureter.
- ✓ The left vein is in relation to the ureter and laterally to its homonymous artery.



Tributaries of the internal iliac vein:

The internal iliac vein drains the visceral plexuses:

- ✓ Middle rectal vein,
- ✓ Uterine vein.

Parietal branches:

These veins drain the pelvic walls and perineum. They include:

- ✓ Superior and inferior gluteal veins,
- Lateral sacral vein,
- ✓ Obturator vein,
- ✓ Internal pudendal veins.





V- CLINICAL APPLICATIONS:

- May-Thurner syndrome (MTS), also known as Iliac Vein Compression Syndrome, is a vascular condition in which the left common iliac vein is compressed by the overlying right common iliac artery against the lumbar spine.
- This compression can lead to reduced blood flow, causing a higher risk of deep vein thrombosis (DVT) in the left leg.
- Although it may be asymptomatic, patients can present with unilateral leg swelling, pain, a sensation of heaviness, and sometimes visible varicosities or skin changes.
- Diagnosis typically begins with Doppler ultrasound, but more detailed imaging such as CT or MR venography is often required.



VI- CONCLUSION:

 The common iliac veins allow for the drainage of venous blood from the pelvis and the lower limb toward the inferior vena cava.

 Throughout their course, the iliac veins are in relation with various organs and vessels of the pelvis.

