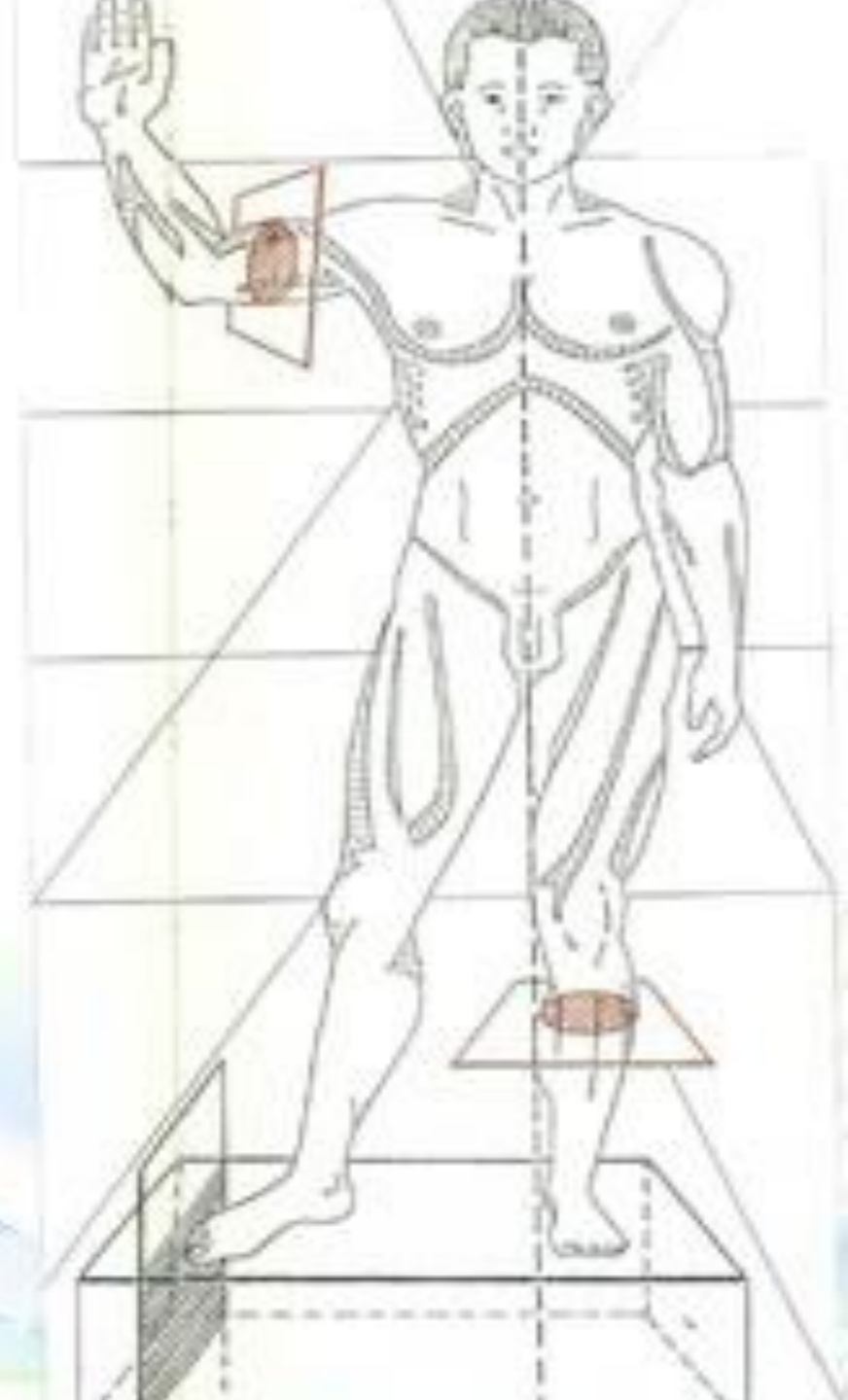


ILIAC ARTERIES



PLAN

I. INTRODUCTION

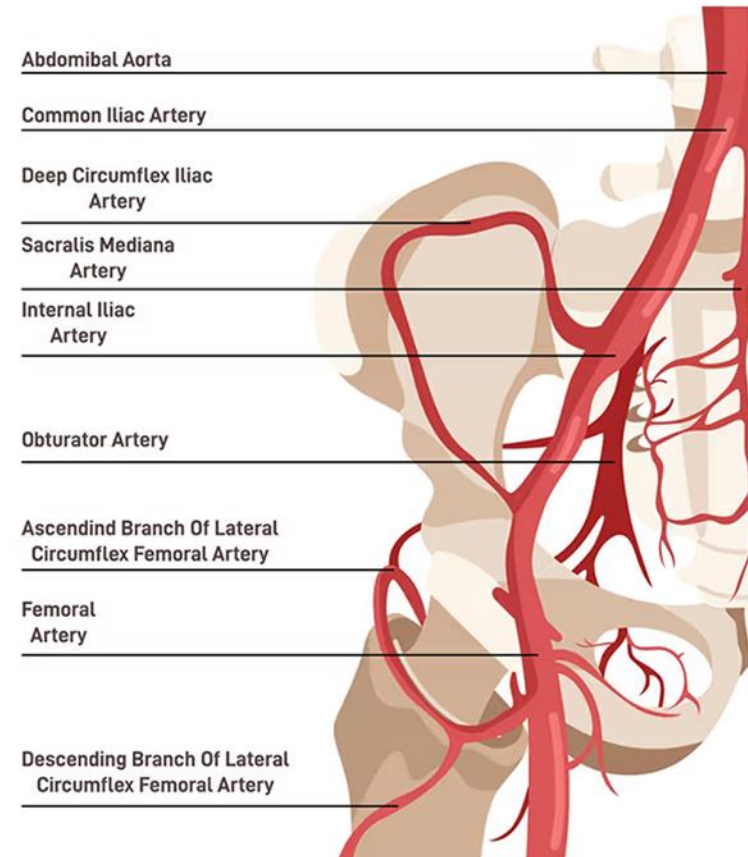
II. COMMON ILIAC ARTERIES

III. EXTERNAL ILIAC ARTERY

IV. INTERNAL ILIAC ARTERY

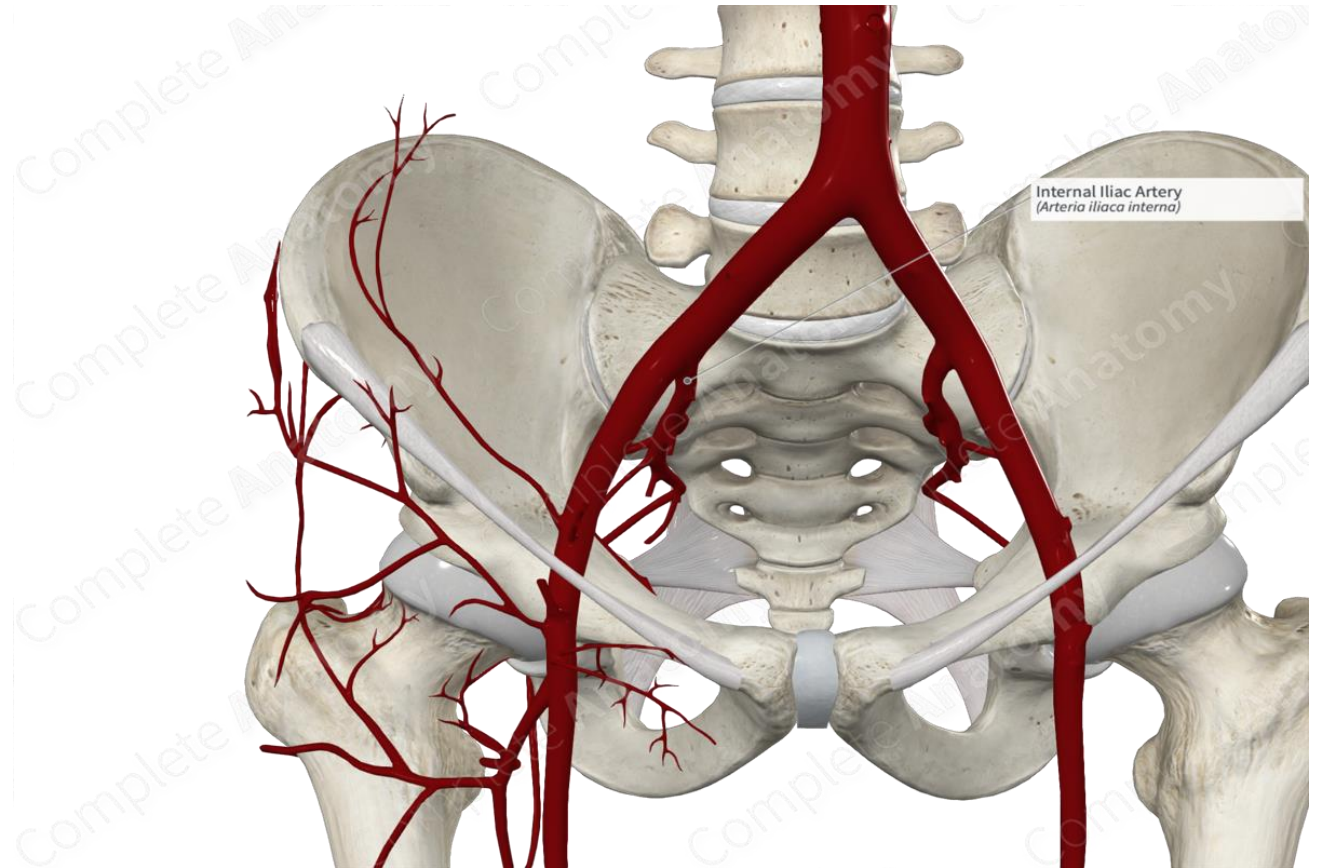
V. CONCLUSION

Iliac Artery Anatomy



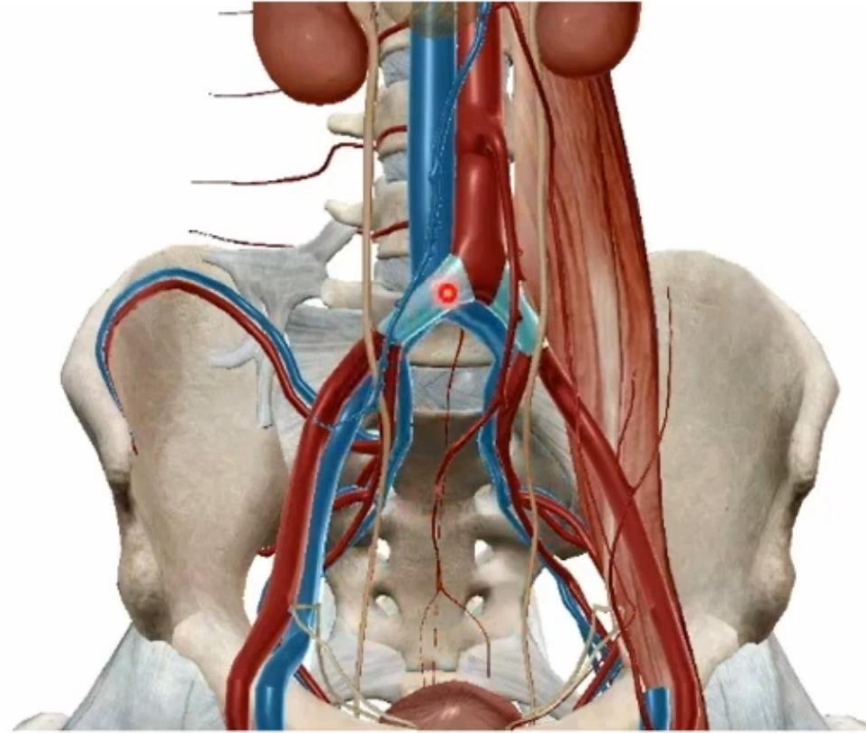
I- INTRODUCTION:

- There are two common iliac arteries.
- Each one divides into two main branches: the external iliac artery and the internal iliac artery.
- Together, they supply blood to the pelvis and the lower limb.



II- COMMON ILIAC ARTERIES:

- Primarily considered as transit arteries, they arise from the aortic bifurcation.
- Short and voluminous.
- They end by dividing into the internal and external iliac arteries near the sacroiliac joint.



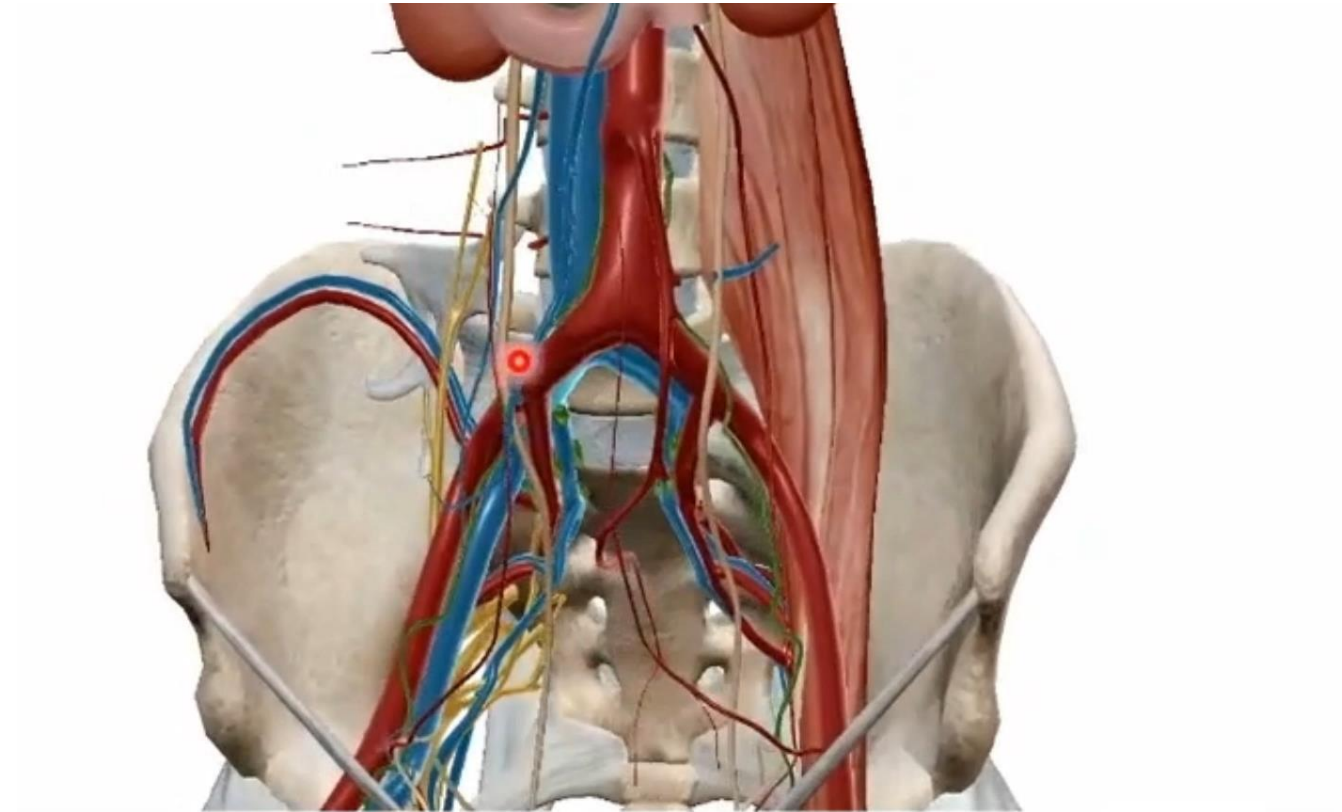
Anatomical relations of the common iliac arteries

The relationships of the right common iliac artery are as follows:

- **Anteriorly:** the lumbar sympathetic trunk.
- **Posteriorly:**
 - ✓ the psoas major muscle,
 - ✓ and the left common iliac vein.
- **Laterally:**
 - ✓ the gonadal vessels,
 - ✓ and the ureter.

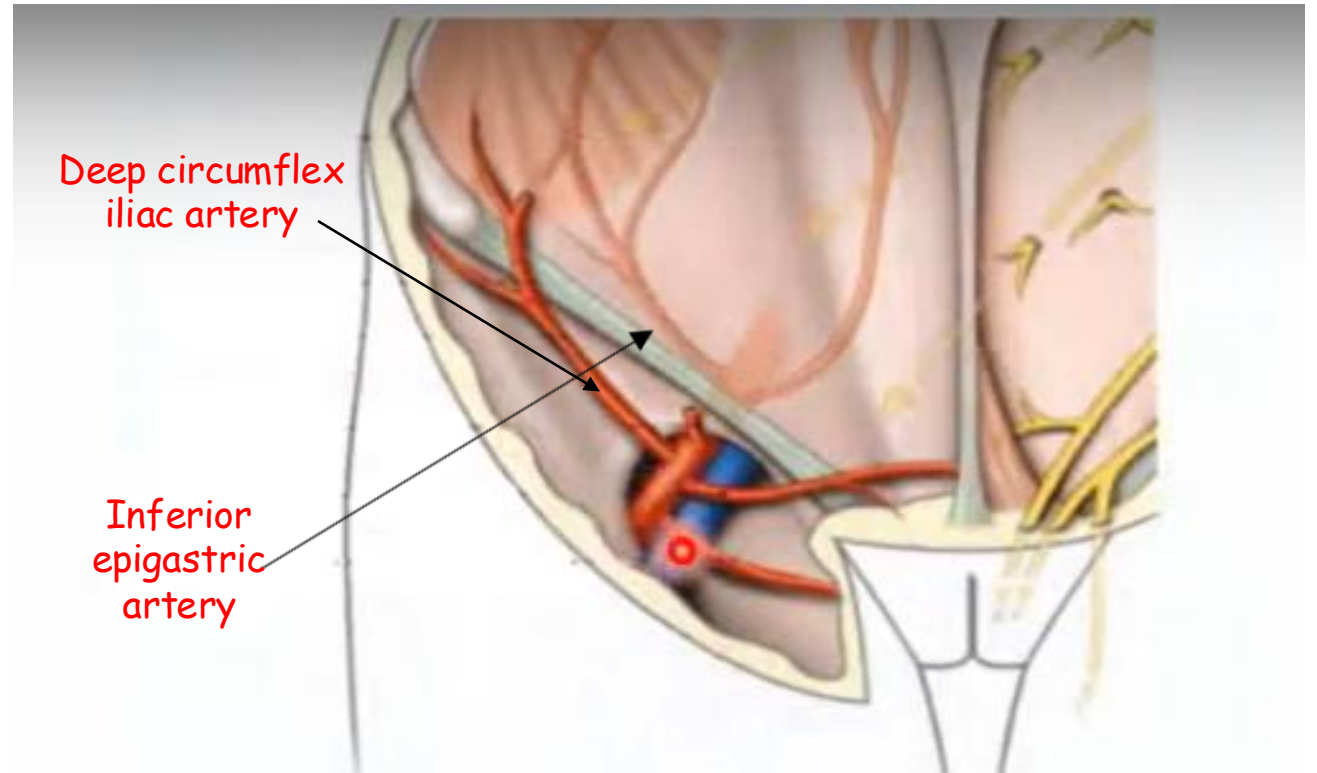
• The relationships of the left common iliac artery are as follows:

- **Anteriorly:** the inferior mesenteric artery.
- **Posteriorly:**
 - ✓ the left common iliac vein,
 - ✓ and the psoas major muscle.
- **Laterally:**
 - ✓ the gonadal vessels,
 - ✓ and the ureter.



III- EXTERNAL ILIAC ARTERY:

- It serves as a transit artery to the lower limb and part of the abdominal wall.
- Two main collateral branches arise from it:
 - **The deep circumflex iliac artery,**
 - **The inferior epigastric artery.**



Anterior view of the inguinal region

III- INTERNAL ILIAC ARTERY:

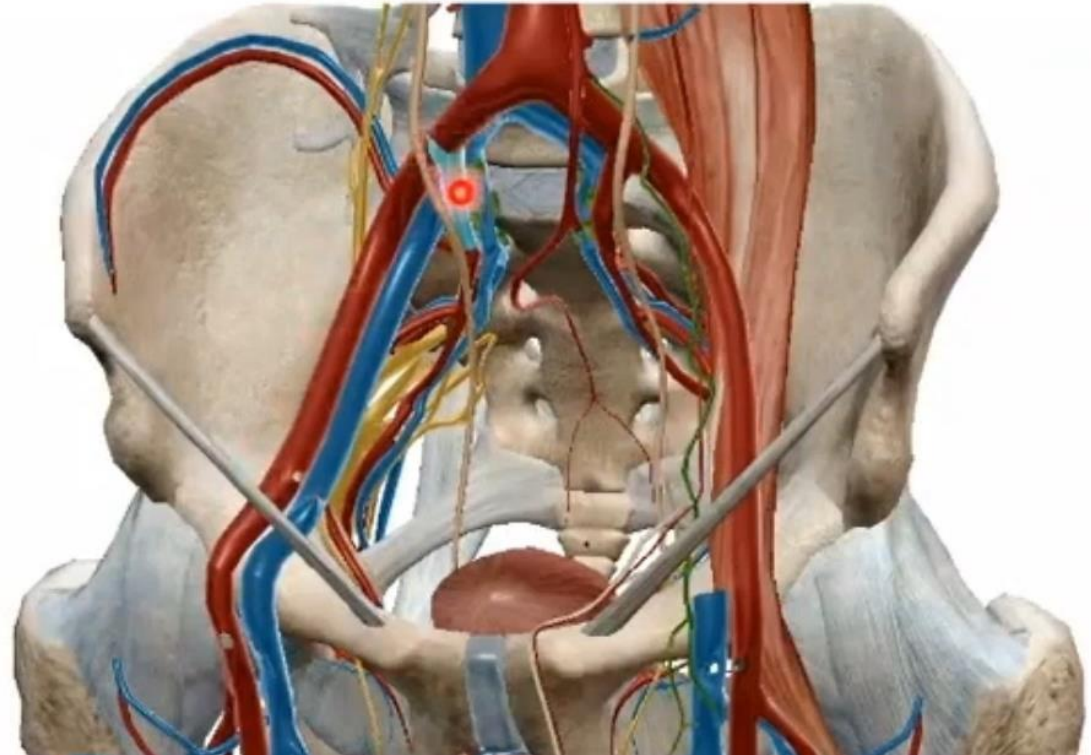
- It often originates at the level of the lumbosacral disc.
- It arises from the posteromedial division of the common iliac arteries and serves as the main artery of the pelvis, supplying both the pelvic wall and its contents.

Internal iliac artery



Trajectory and anatomical relations

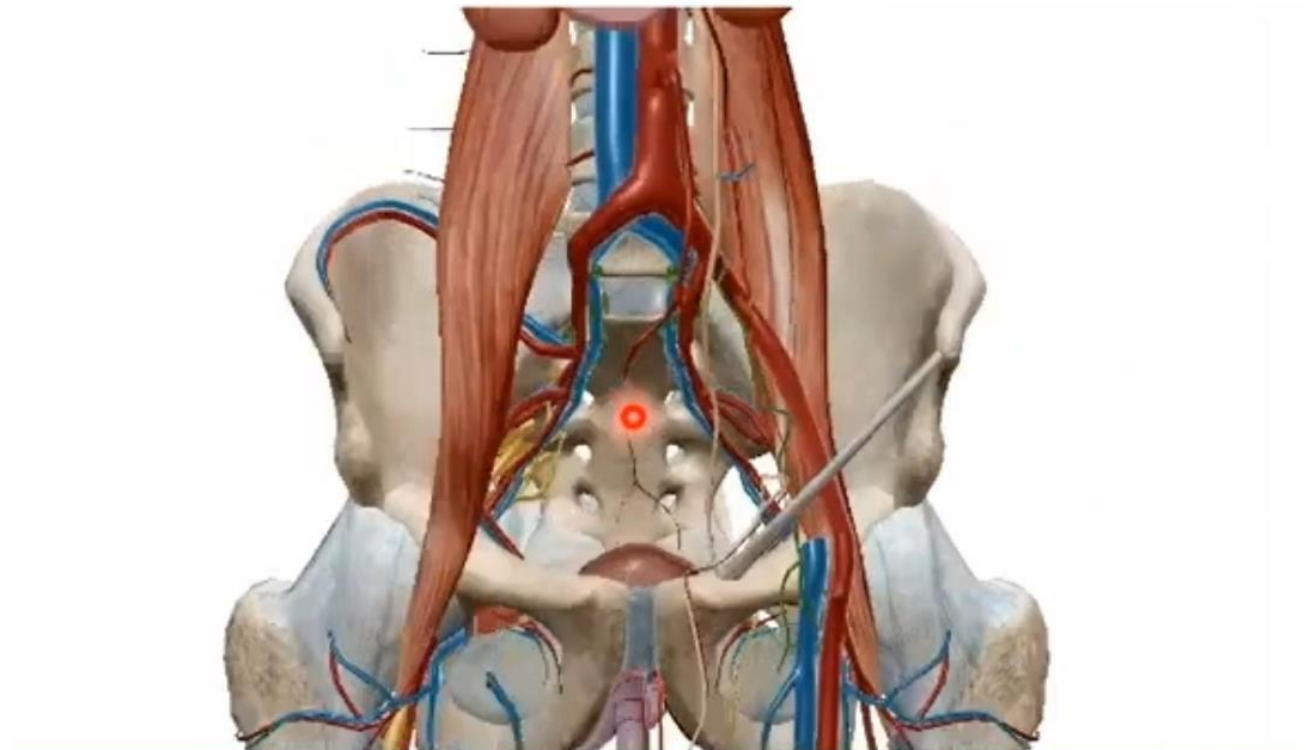
- It descends vertically along the pelvic wall, accompanied by the interiliac and internal iliac lymph nodes.
- Its anatomical relations are as follows:
 - **Posteriorly:**
 - ✓ the sacrum,
 - ✓ and the sacroiliac joint.
 - **Laterally:**
 - ✓ the psoas major muscle,
 - ✓ and the external iliac vein.
 - **Medially:** the terminal part of the ileum on the right side
 - **Anteriorly:** the ureter.



Terminal branches

The terminal branches of the internal iliac artery divide at the level of the greater sciatic notch into two trunks:

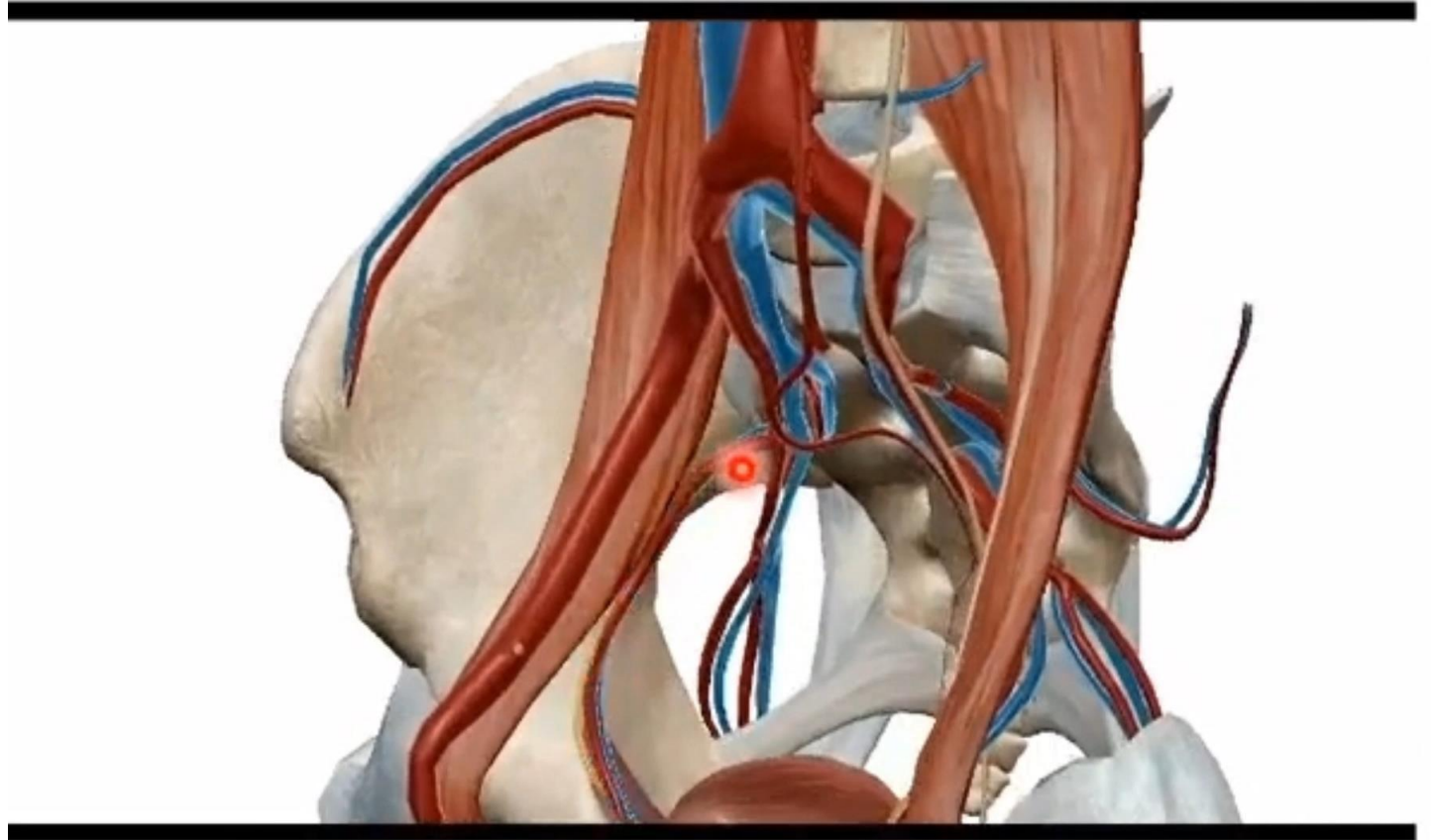
- ✓ an anterior trunk,
- ✓ and a posterior trunk.



ANTERIOR TRUNK

➤ Obturator artery :

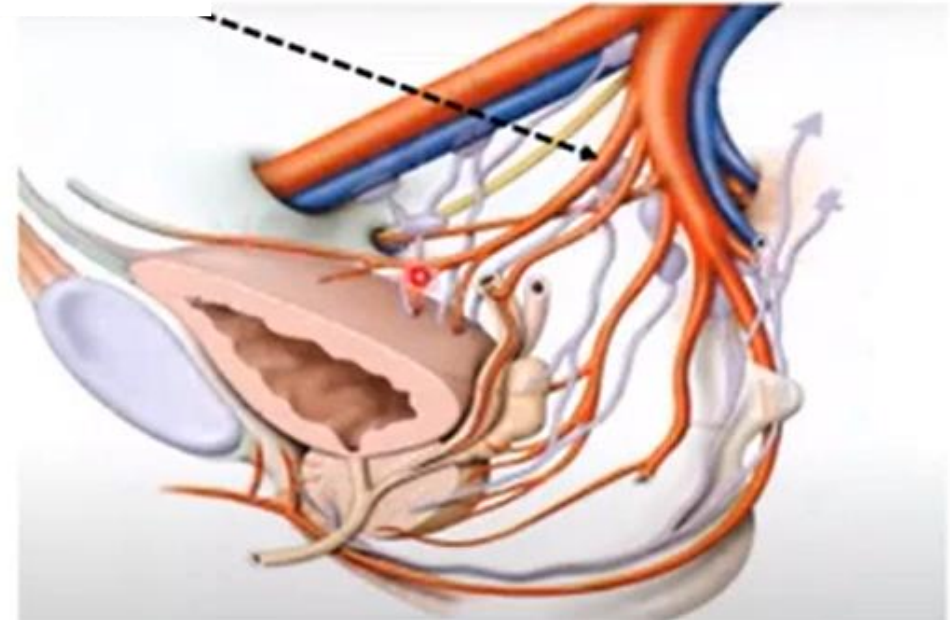
- It is a branch of the anterior trunk of the internal iliac artery.
- It descends forward towards the obturator canal, where it is applied to the obturator muscle, with the obturator nerve running above it and the obturator vein running below it.
- It gives :
 - ✓ muscular branches to the psoas,
 - ✓ a vesical branch,
 - ✓ and a retro-pubic branch.
- The terminal branches of the obturator artery descend forward towards the obturator canal, dividing into two branches:
 - ✓ An anterior branch,
 - ✓ And a posterior branch.



➤ Umbilical artery:

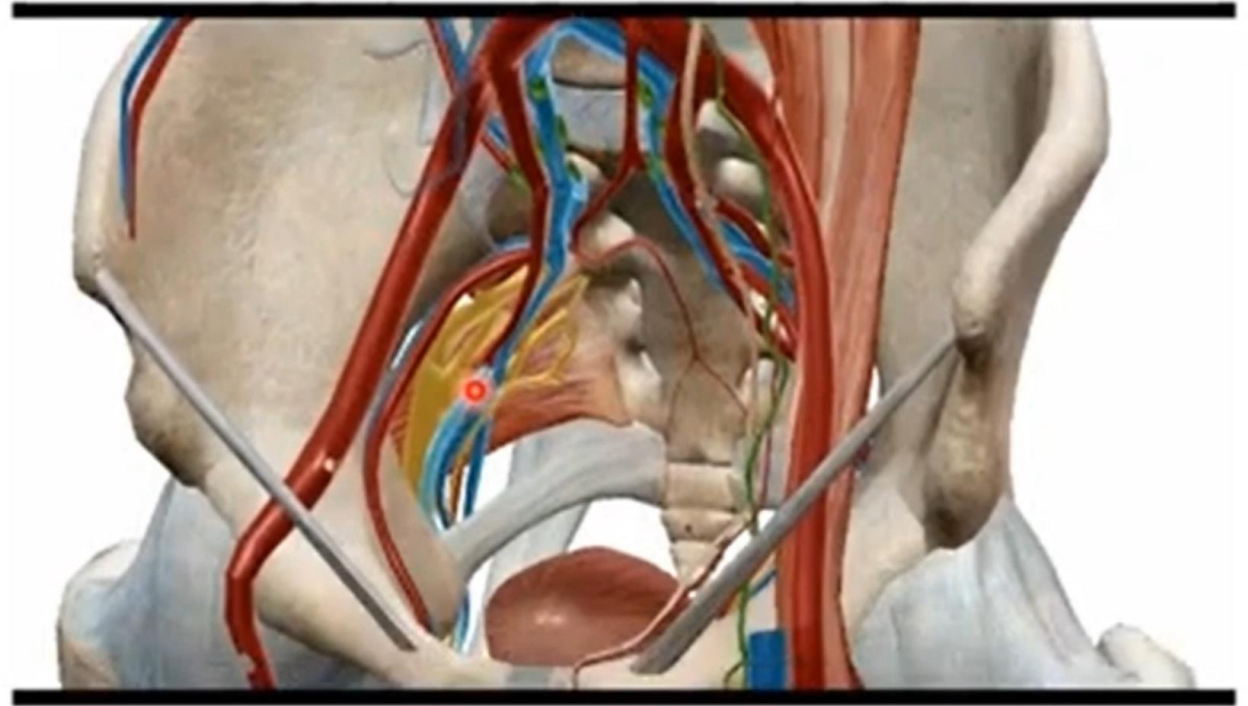
- It is a branch of the anterior trunk of the internal iliac artery.
- It is the first visceral branch of the internal iliac artery, descending to run along the lateral surface of the bladder.
- It gives off 2 to 5 vesical arteries.

Umbilical artery



➤ Internal pudendal artery:

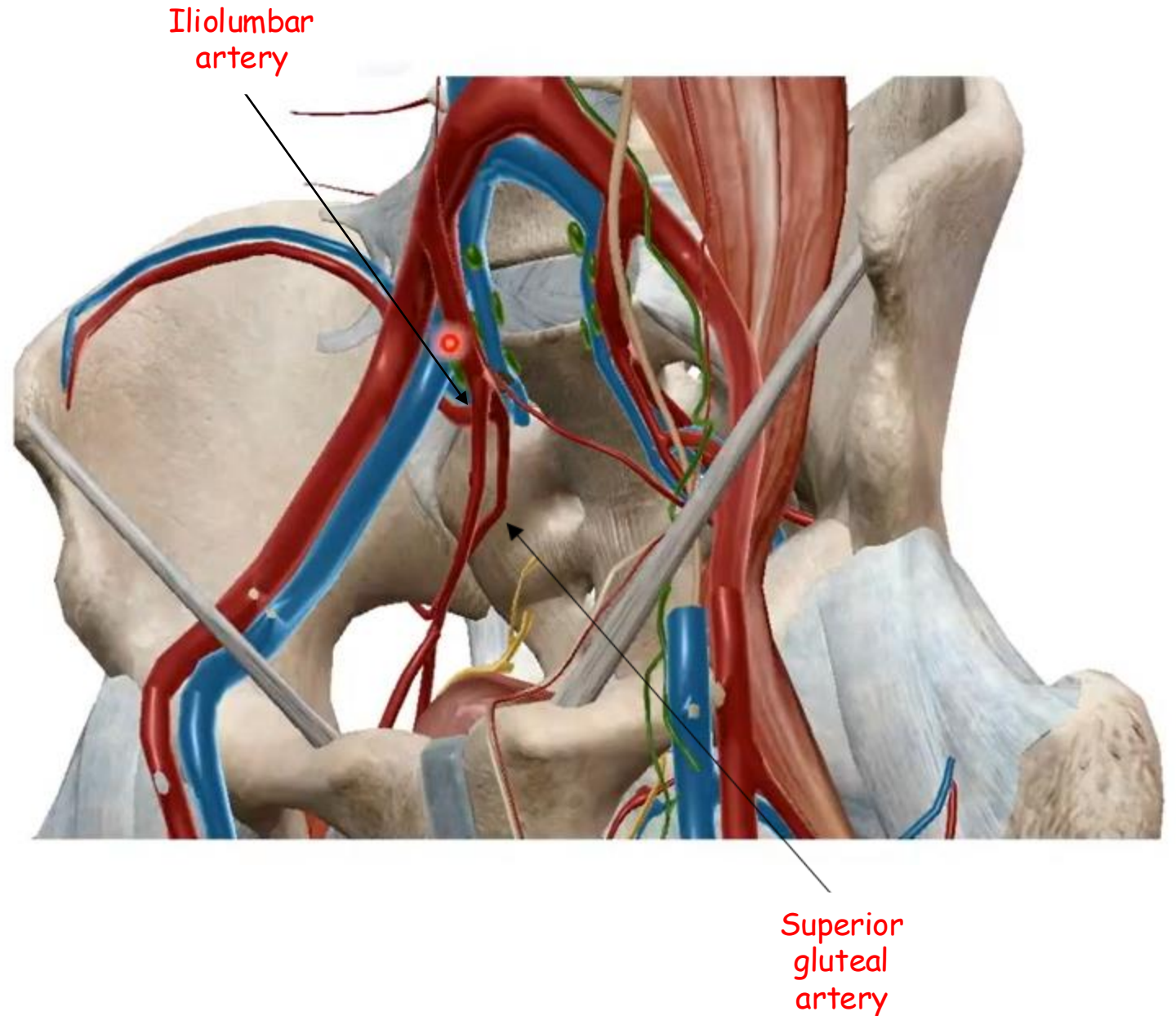
- It arises from the internal iliac artery and is responsible for supplying blood to the perineum, external genitalia, and certain muscles of the pelvic floor.
- The internal pudendal artery passes through the pelvis, descending vertically. It then traverses the infrapiriform foramen and exits the pelvis between the sciatic nerve and the pudendal nerve.
- It is accompanied medially by the pudendal nerve and the inferior gluteal vessels, and laterally by the sciatic nerve.
- It then passes behind the transverse ligament and terminates in:
 - The deep artery of the penis or clitoris.
 - The dorsal artery of the penis or clitoris.
- Its collateral branches are :
 - The urethral artery, **(B)**
 - The inferior rectal artery, **(A)**
 - The perineal artery. **(C)**



POSTERIOR TRUNK

The posterior trunk of the internal iliac artery gives rise to :

- the iliolumbar artery,
- and the superior gluteal artery.



IV- CONCLUSION:

- The iliac arteries are key conduits for blood flow to the pelvis and lower limbs.
- Their branching patterns and anatomical variations must be well understood to prevent complications during surgical procedures or interventional radiology.
- Given their central role in lower limb perfusion and pelvic organ vascularisation, the iliac arteries remain a critical focus in both anatomical education and clinical practice.

