

Ureter

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▶ **URETER**

▶ **OBJECTIVES**

Origin and length

Course

Anterior and Posterior relations

Arterial and nerve supply

Lymph drainage constrictions

Male and female ureters

Radiology

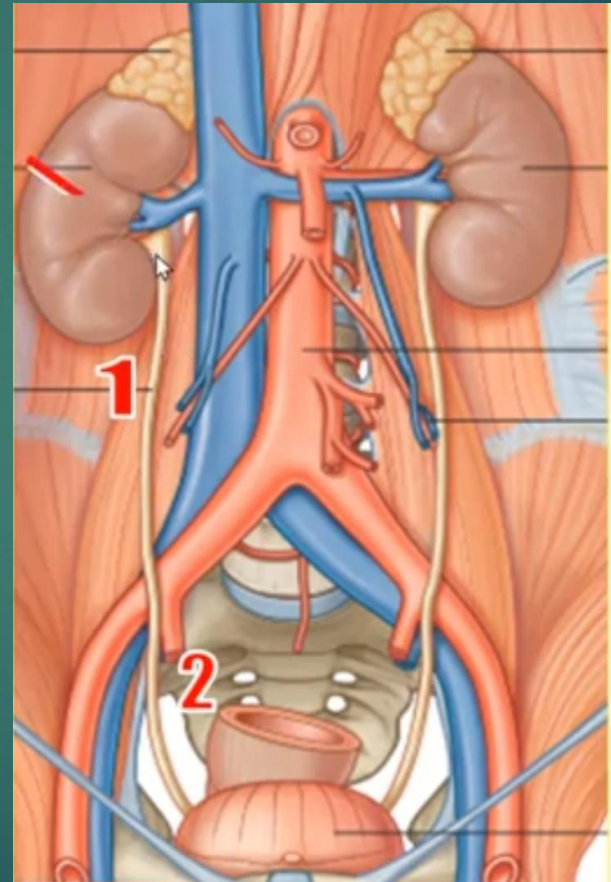
► URETER

Muscular tubular structure extending from kidney to the posterior surface of urinary bladder

LENGTH : 10 inches

ORIGIN : Continuation of renal pelvis

Widest at renal pelvis and narrows down as they enter the U.B



COURSE: 2 parts

▶ **ABDOMINAL PART :**

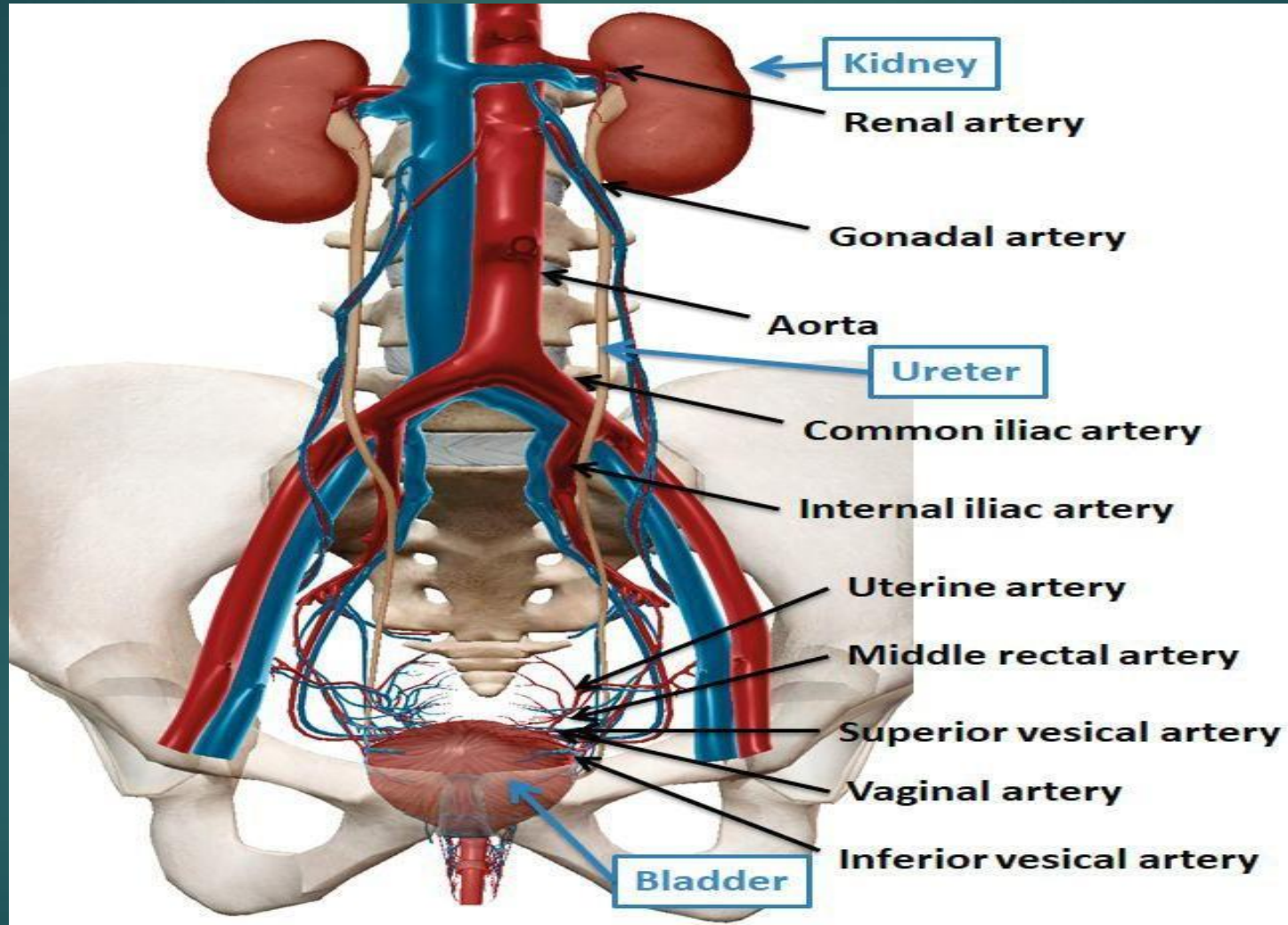
FROM renal pelvis

TO bifurcation of renal pelvis

▶ **PELVIC PART**

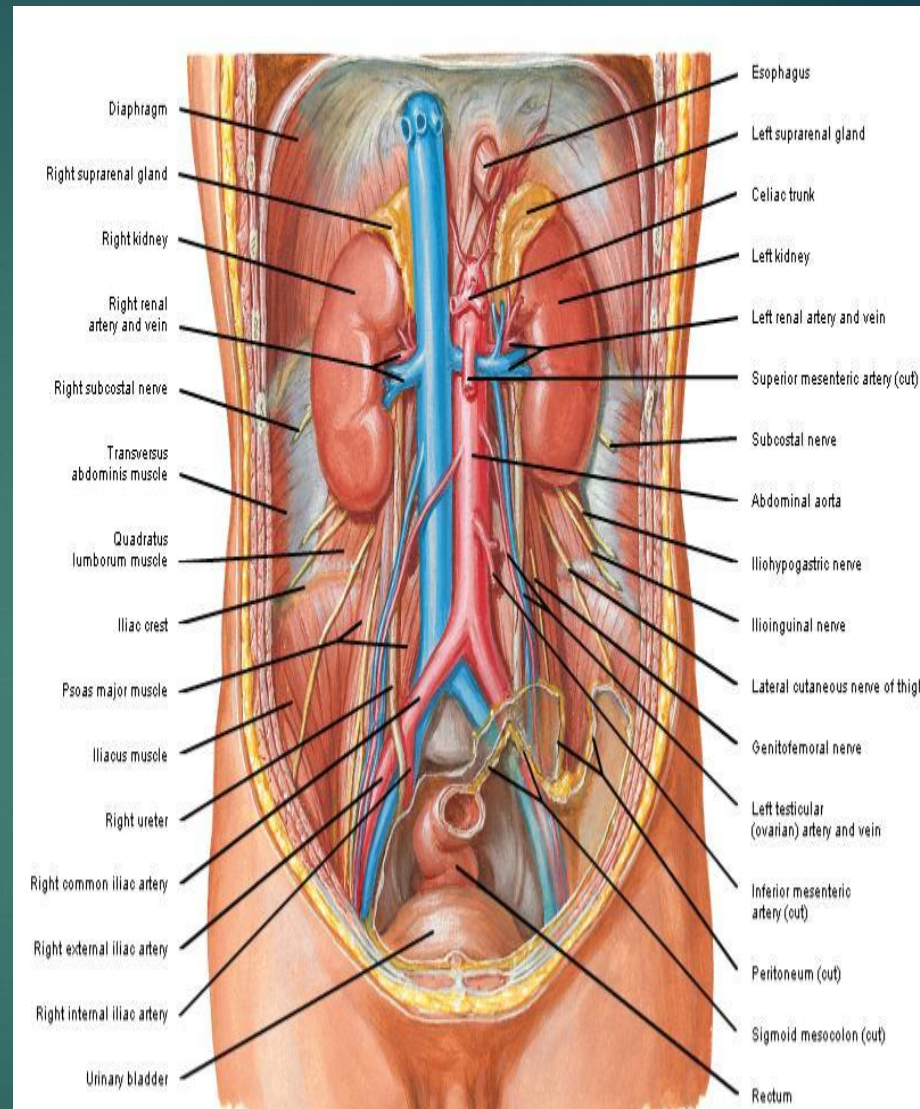
FROM bifurcation of Common iliac artery

TO posterior surface of urinary bladder



Posterior Relations

- ▶ Psoas major
- ▶ Genitofemoral nerve
- ▶ Bifurcation of Common iliac artery
- ▶ Side walls pelvis



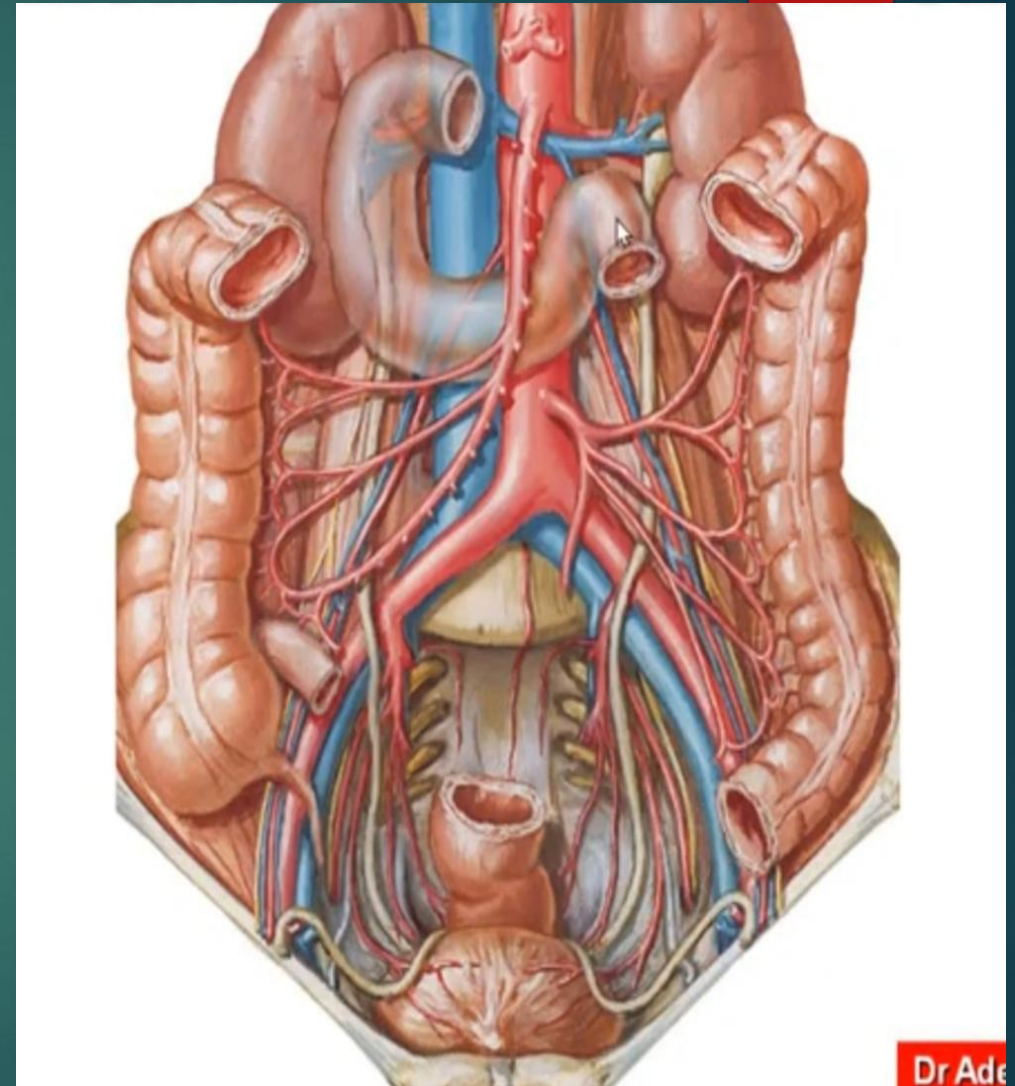
ANTERIOR RELATIONS

Right ureter

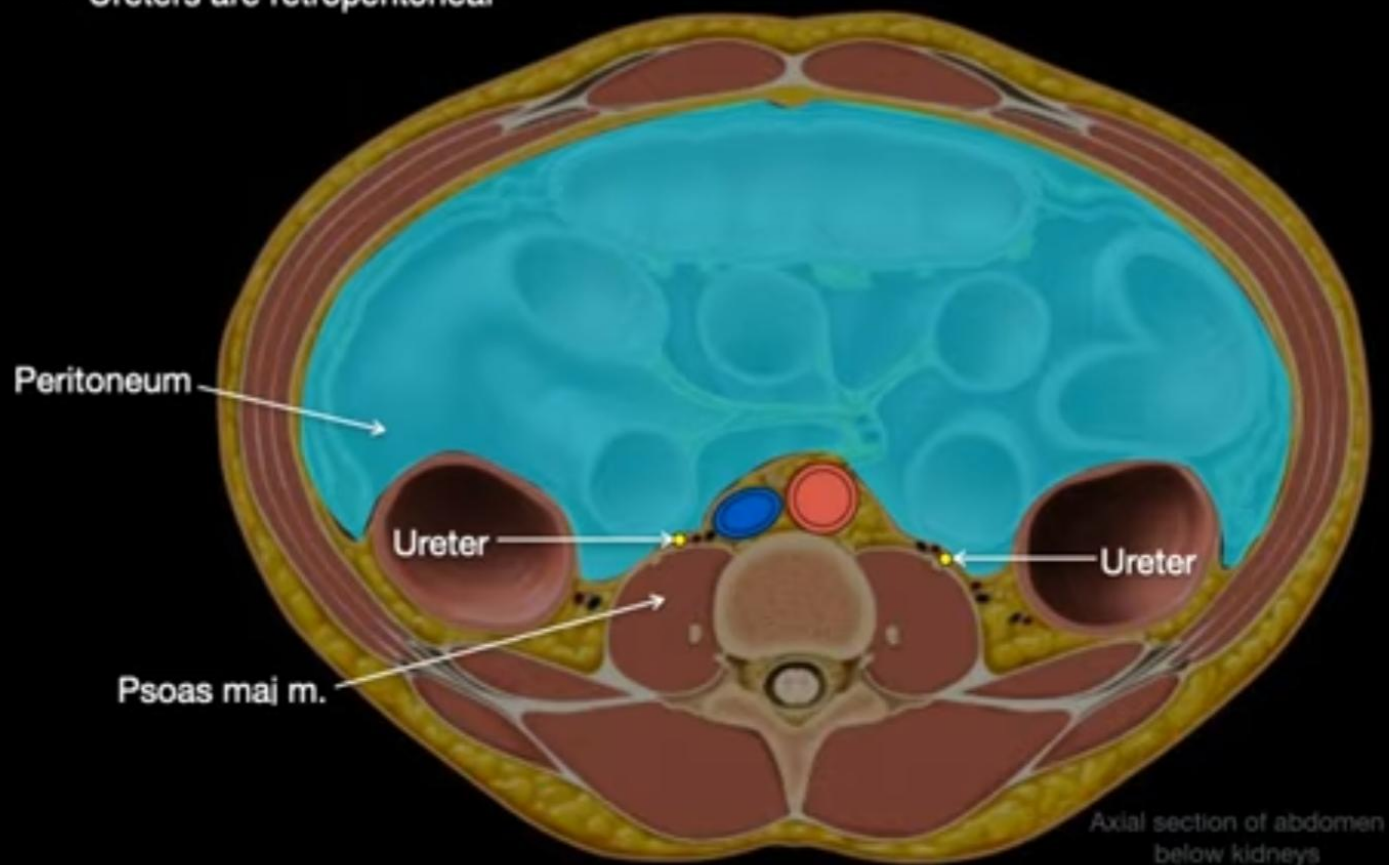
- Renal vessels
- 2nd part of duodenum
- 3rd part of duodenum
- **4 Arteries:**
 - Right gonadal artery
 - Right colic artery
 - Right illiocolic artery
 - Superior mesenteric artery
- Roof of mesentery
- Terminal part of illium

Left ureter

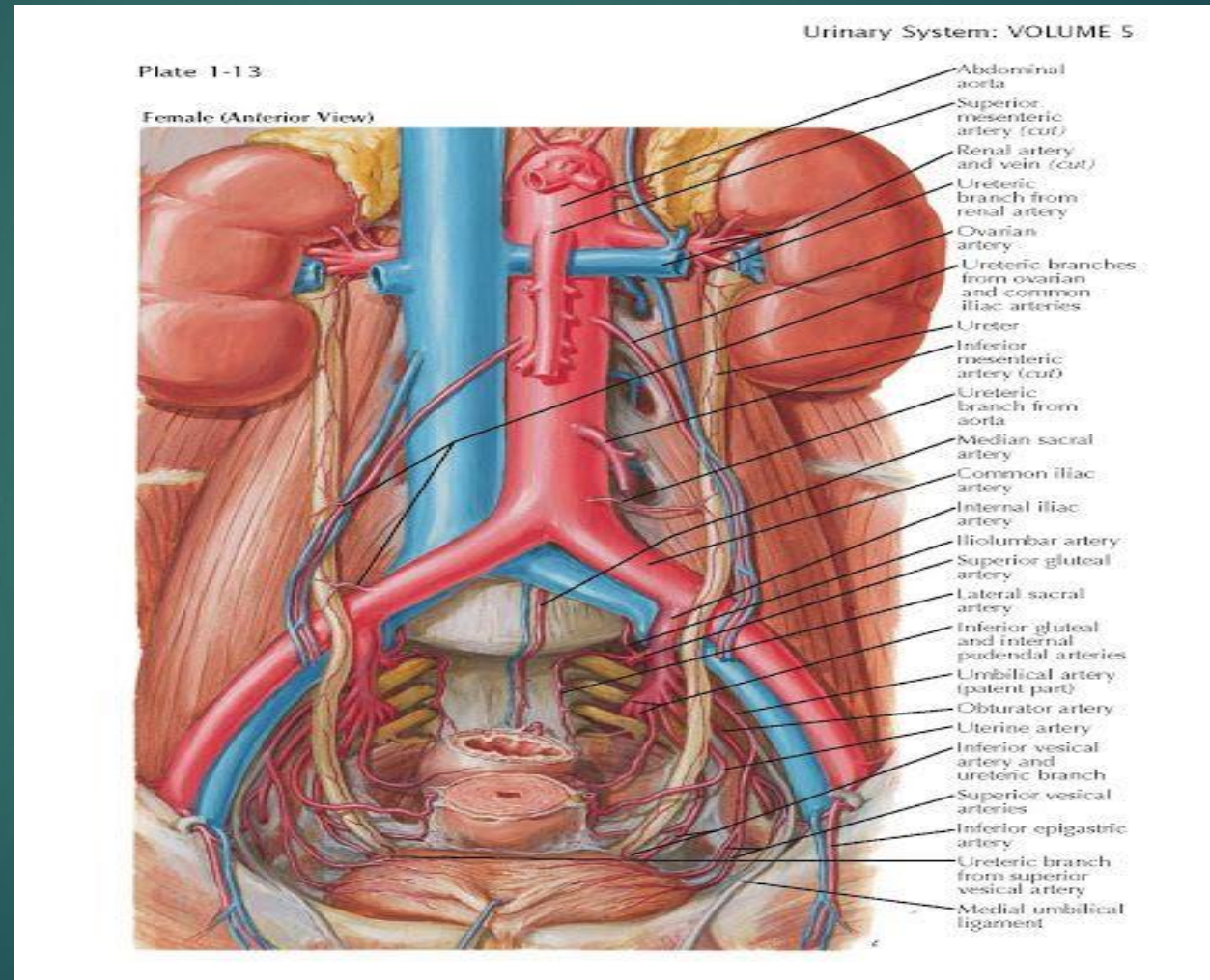
- Renal vessels
- Body of pancreas
- Jejunum
- **4 arteries**
 - left gonadal artery
 - left colic artery
 - 2 sigmoid arteries
- Sigmoid mesocolon
- Sigmoid colon




- Ureters are retroperitoneal



ARTERIAL SUPPLY:



- 
- ▶ Renal artery
 - ▶ Gonadal artery
 - ▶ Abdominal aorta
 - ▶ Common iliac artery
 - ▶ Internal iliac artery
 - ▶ Uterine artery
 - ▶ Inferior and superior vesical artery

***All these vessels make anastomosis with each other in advertising of the ureter**

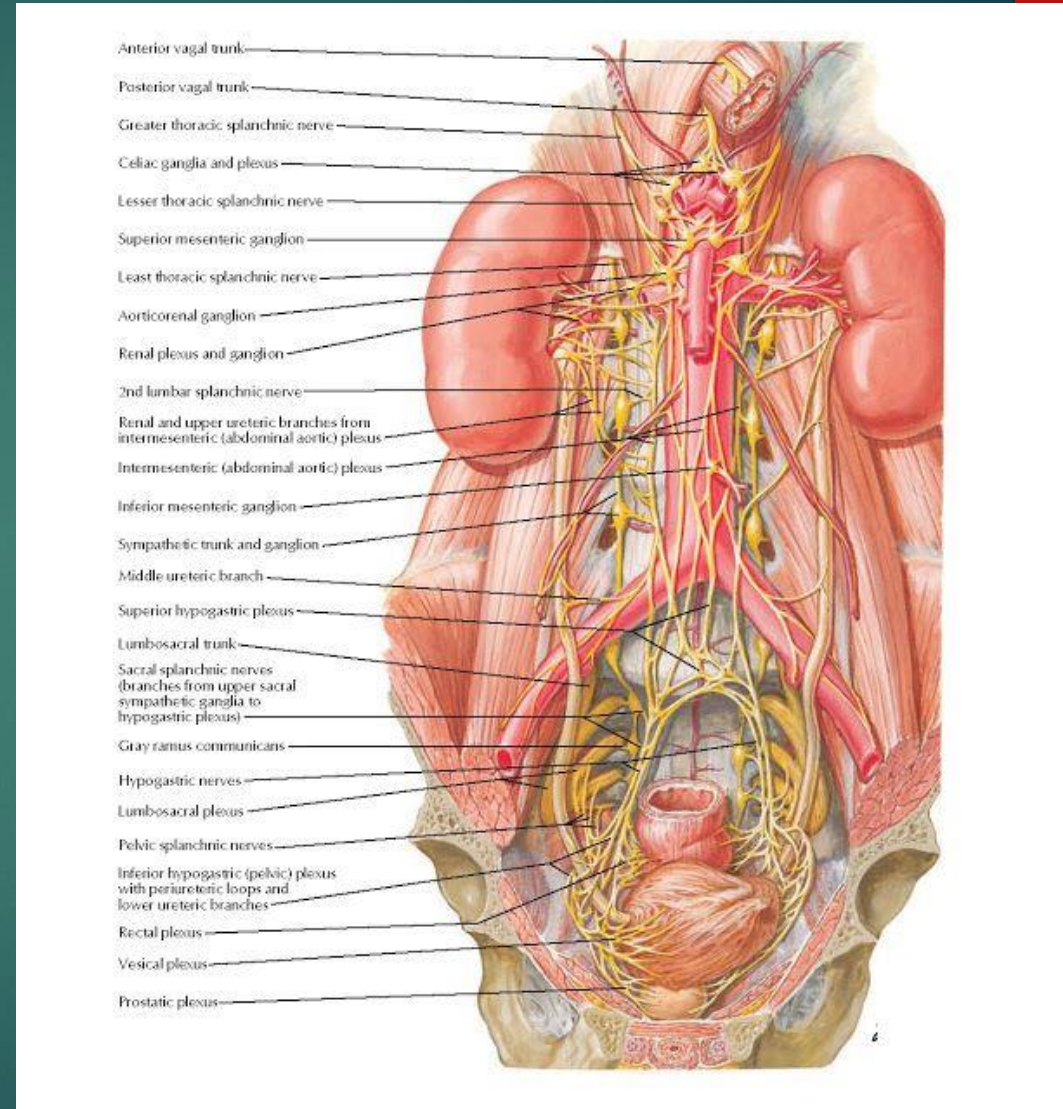
NERVE SUPPLY

- ▶ **Sympathetic : T10 to L1**
- ▶ Sympathetic fibres from R10 to L1 segments of spinal cord reach ureter via coeliac and hypogastric plexi

PARASYMPATHETIC : S1 S3,S4

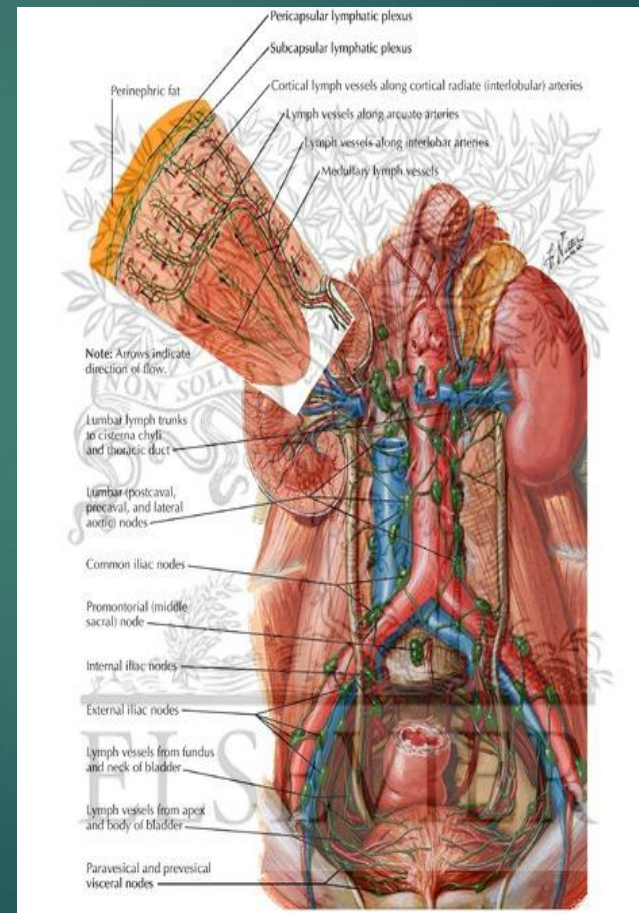
From pelvic Splanchnic nerves

These innervation are not responsible for production and generation of peristaltic action But only speeds up peristaltic action



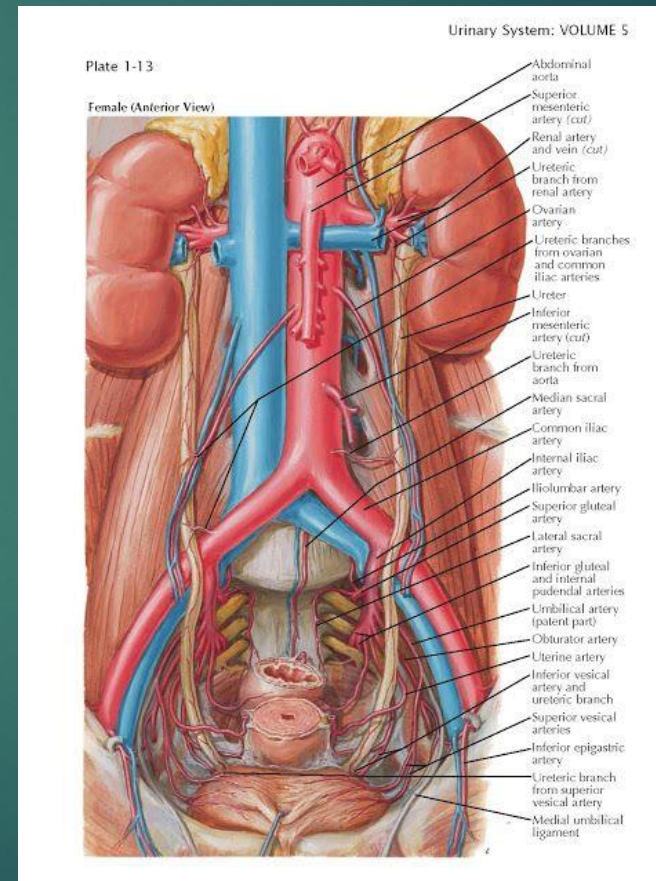
LYMPH DRAINAGE

- ▶ Distally: into internal iliac lymph nodes
- ▶ Middle segment: to common iliac nodes
- ▶ Proximally: to para aortic Lymph nodes

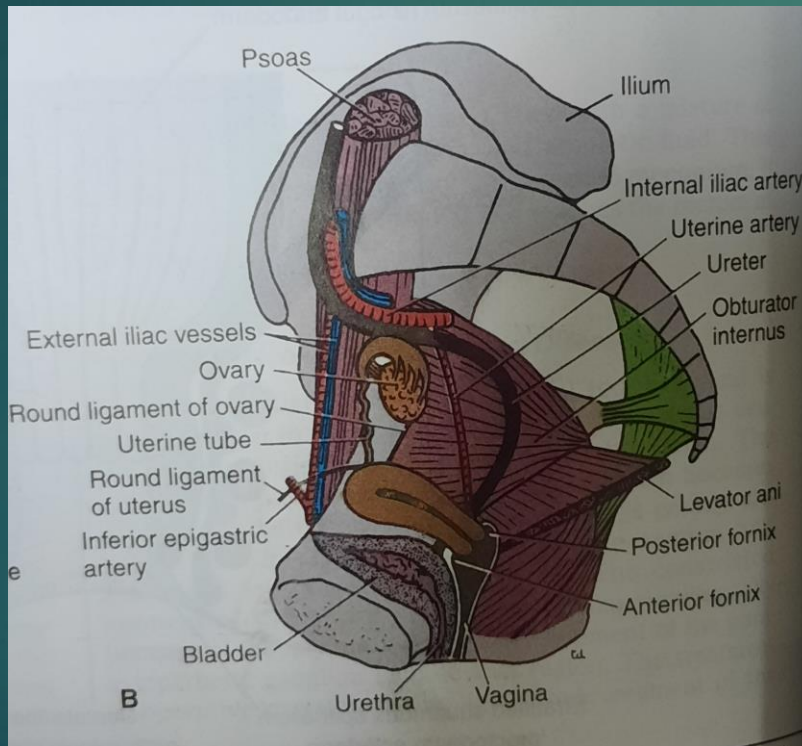


CONSTRICTIONS

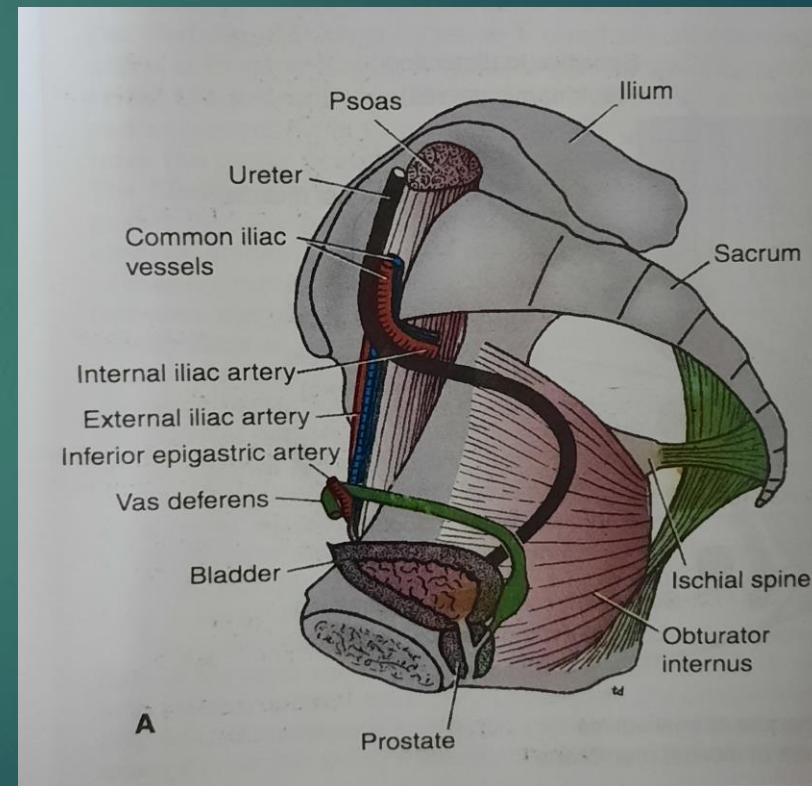
- ▶ **SITES:**
- ▶ **Pelviureteric Junction**
- ▶ **Bifurcation of Common Iliac artery**
- ▶ **intramural part**
- ▶ **CLINICAL importance :**
- ▶ **They are common sites For the arrest of stones**



Female ureter



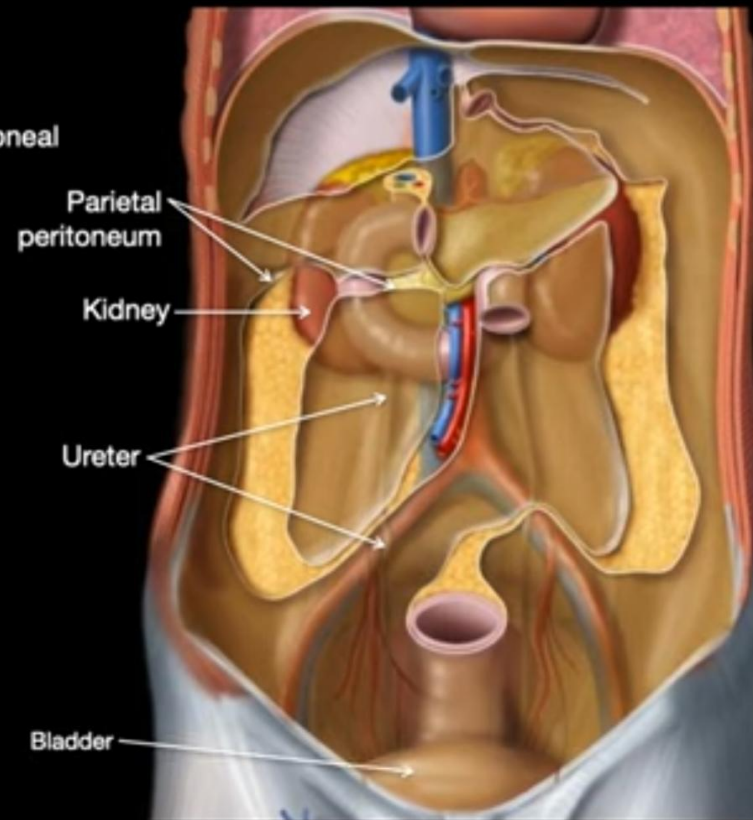
Male ureter



Ureter

Topography

- Ureters are retroperitoneal



Radiological Anatomy

- ▶ Medial to tips of transverse process of lumbar vertebrae
- ▶ Crosses pelvic brim at sacroiliac joint
- ▶ To ischial spine
- ▶ Pubic tubercle

