

Renal Pelvis and Calices

Renal sinus description & syntopy

The renal sinus, which lies inside the hilum of the kidney, contains the renal pelvis and its calices, together with the other structures, nerves, vessels and fat.

Pelvis

The renal pelvis is the flattened, funnel-shaped expansion of the superior end of the ureter and its apex is continuous with the ureter. The pelvis receives 2–3 major calices, each of which sub-divides into 2–3 minor calices. The pelvis can exist as wide ampulla-shaped or tubular (branched). In living persons, the pelvis and its subsequent calices are collapsed (empty).

Calyx

Each minor calyx surrounds a renal papilla (apex of pyramid) and collects the urine.

Ureter

Ureter is shaped like a slightly flattened tube of about 4–7 mm diameter. It has variable length, but average might be around 30 cm. It is about 1 cm shorter in the female.

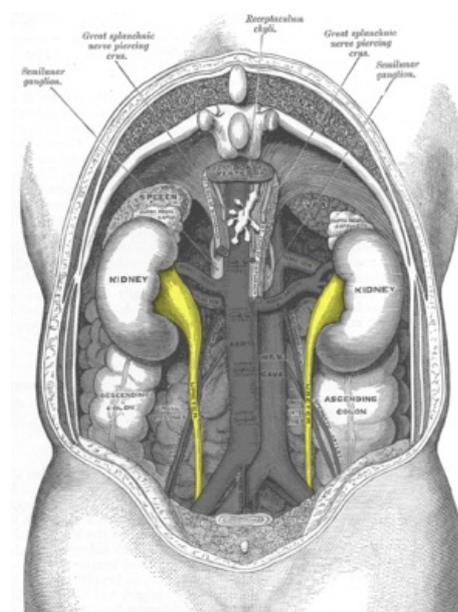
Syntopy of ureter

- Runs inferiorly from the apex of the renal pelvis at the hilum.
- Passes over the pelvic grim at the bifurcation of the common iliac artery.
- Runs along the lateral wall of pelvis and enters the urinary bladder.
- Abdominal parts adhere closely to the parietal peritoneum and are retroperitoneal throughout their course.
- Three constrictions:
 1. At junction between renal pelvis and ureter.
 2. At crossing of brim of pelvic inlet.
 3. During passage through wall of urinary bladder.

Vasculature of ureter

- **Abdominal portion:** branches from renal arteries, abdominal aorta and common iliac artery.
- **Pelvic portion:** branches from superior vesical aa, middle rectal aa, uterine/vaginal (female), inferior vesical artery (male).

Veins: follow the arteries in the same way and drain into renal and testicular (ovarian) veins.



Syntopy of ureters.

Links

Related articles

- Kidney
- Renal Blood Vessels and Renal Segments
- Structure of Kidney

Bibliography

- MOORE, Keith L - DALLEY, Arthur F. *Clinically Oriented Anatomy*. 5. edition. Lippincott Williams & Wilkins, 2005. ISBN 0781736390.