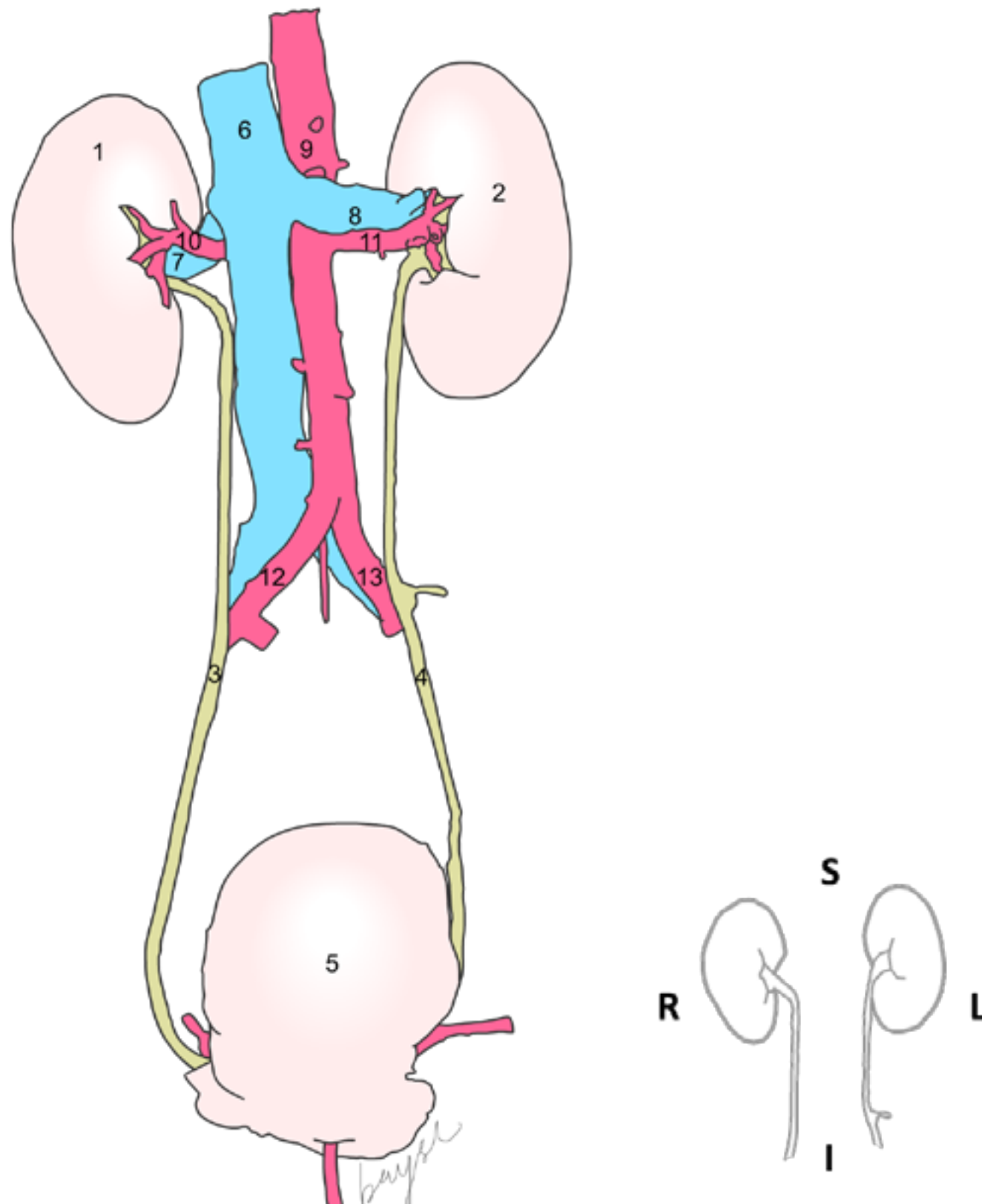


**POSTERIOR ABDOMINAL WALL
KIDNEY, URETER AND URINARY BLADDER**



Anterior view, showing the vessels of kidneys, ureters and bladder.

- | | | |
|----------|-----|---------------------------|
| | 1. | Right kidney |
| | 2. | Left kidney |
| | 3. | Right ureter |
| | 4. | Left ureter |
| | 5. | Urinary bladder |
| Veins | 6. | Inferior vena cava |
| | 7. | Right renal vein |
| | 8. | Left renal vein |
| Arteries | 9. | Abdominal aorta |
| | 10. | Right renal artery |
| | 11. | Left renal artery |
| | 12. | Right common iliac artery |
| | 13. | Left common iliac artery |

Kidneys are retroperitoneal organs present on the Posterior abdominal wall.

Right kidney is slightly placed lower than the left kidney. The perirenal fascia surrounding the kidneys contains the perirenal fat and suprarenal glands.

Hilum of the kidney: Renal vein, renal artery and the ureter are arranged from anterior to posterior here.

Renal arteries are direct branches from the abdominal aorta. They supply 20% of the cardiac output to the kidneys.

Both renal veins drain into the inferior vena cava. Left renal vein is longer than the right renal vein. It receives tributaries from left gonadal vein, suprarenal vein.

The pelviureteric junction at the hilum is a potential site for renal calculi deposition.

CLINICAL CONSIDERATIONS

The ureters can become infected – ureteritis. When kidney stones descend from the renal pelvis into the ureter, the pain can be excruciating. Accessory ureters are quite common. The urinary bladder becomes infected easily, particularly female. This infection (a cystitis) can ascend the ureters (ureteritis) and reach the renal pelvis (pyelitis).

Nut cracker syndrome : Left renal vein hypertension as the vein is compressed between aorta and the superior mesenteric artery leading to haematuria and varicocele in children.

The left renal vein is three times longer than the right and hence the left kidney is the most preferred for donor nephrectomy.

Question(s)

- *Where is the renal papillae of the renal pyramids located?*
- *Q: Identify the area where the renal artery enters the kidney.*