

# Urogenital system

**Urinary System**

**Genital System**



**Excretion of fluid wastes**



**Reproduction**

**Urinary system**

**Kidneys**

**Ureters**

**Urinary bladder**

**Urethra**

Urinary System Model



# Kidneys

Function:

Colour:

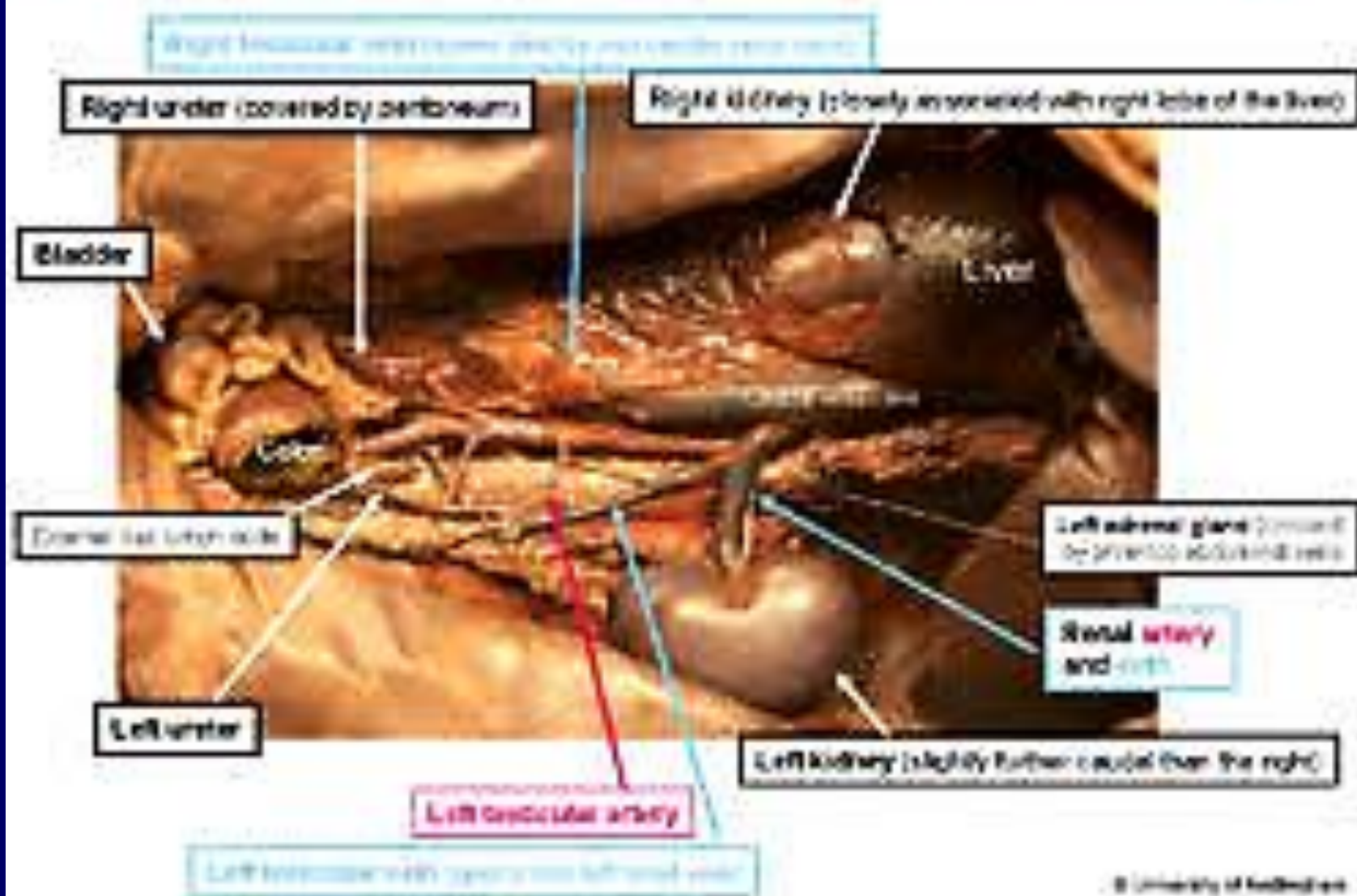
**Brownish red to dark bluish**

Position:

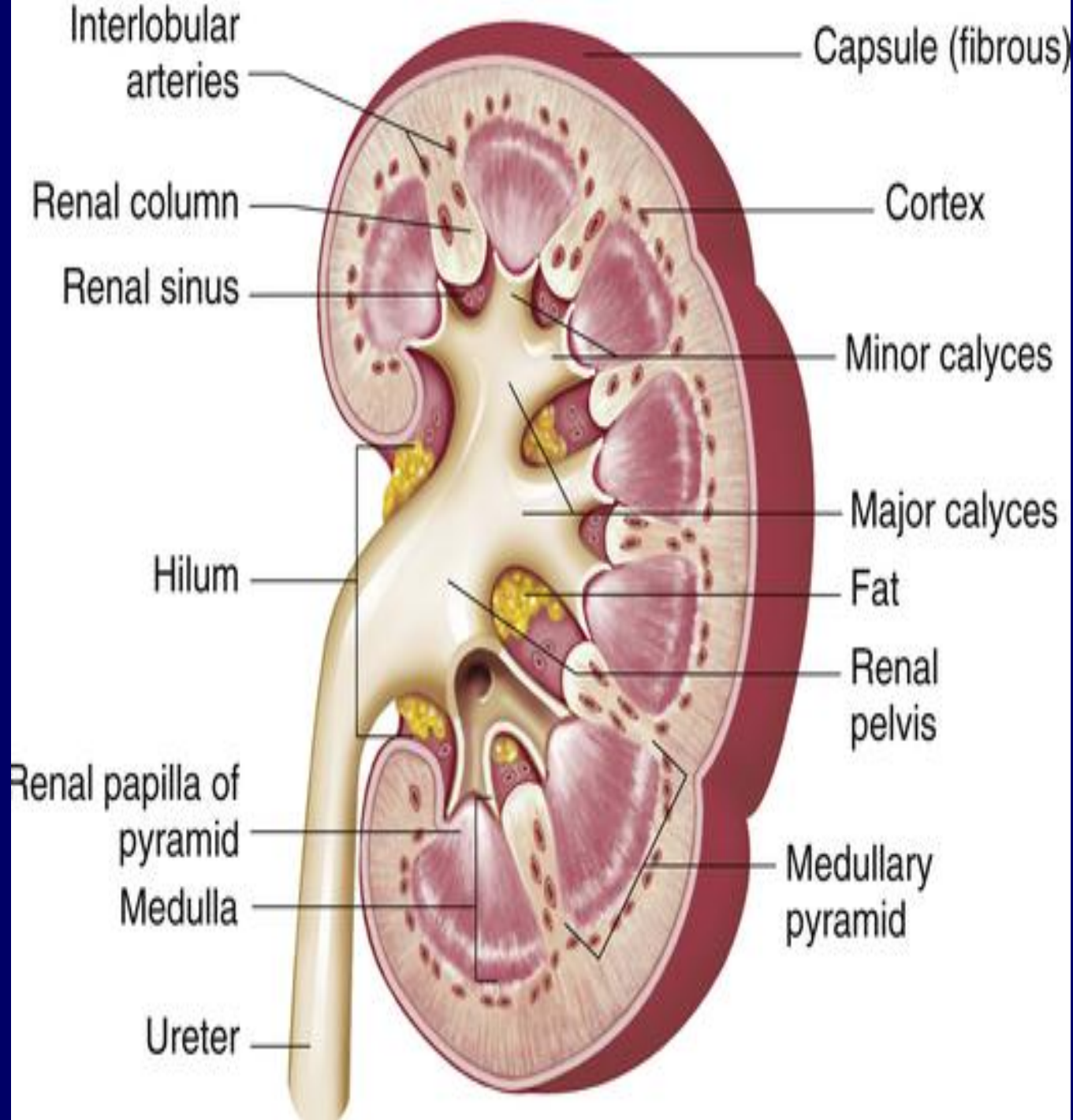
- In the lumbar area.
- One on each side of vertebral column.
- Retroperitoneal.
- 2 kidneys are asymmetrically situated, right kidney located slightly cranial to the left one except in pigs they are symmetrically placed .



Male dog: on the left side the peritoneum and retroperitoneal fat has been removed.







(A)

**Anterior surface  
of right kidney**

Lateral  
border

Fibrous capsule  
(cut and peeled back)

Medial border

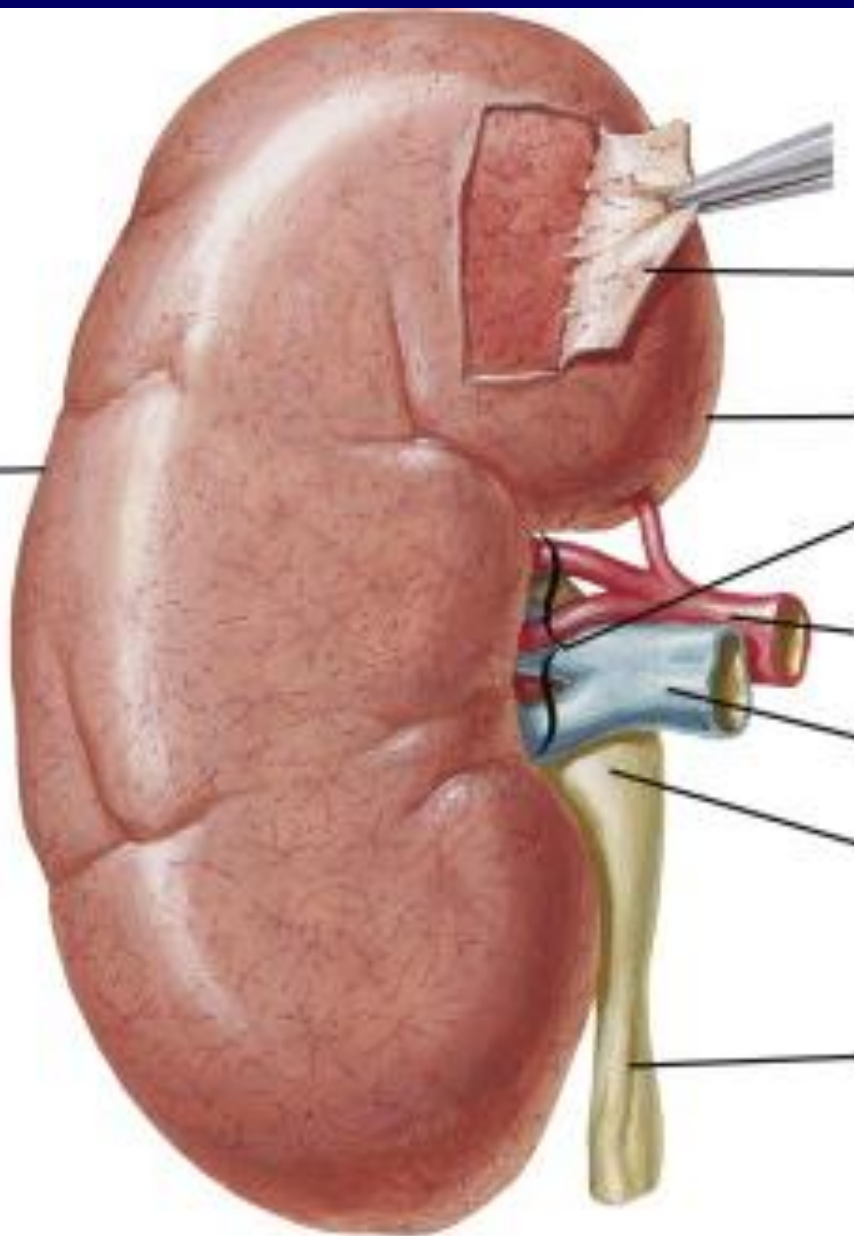
Hilum

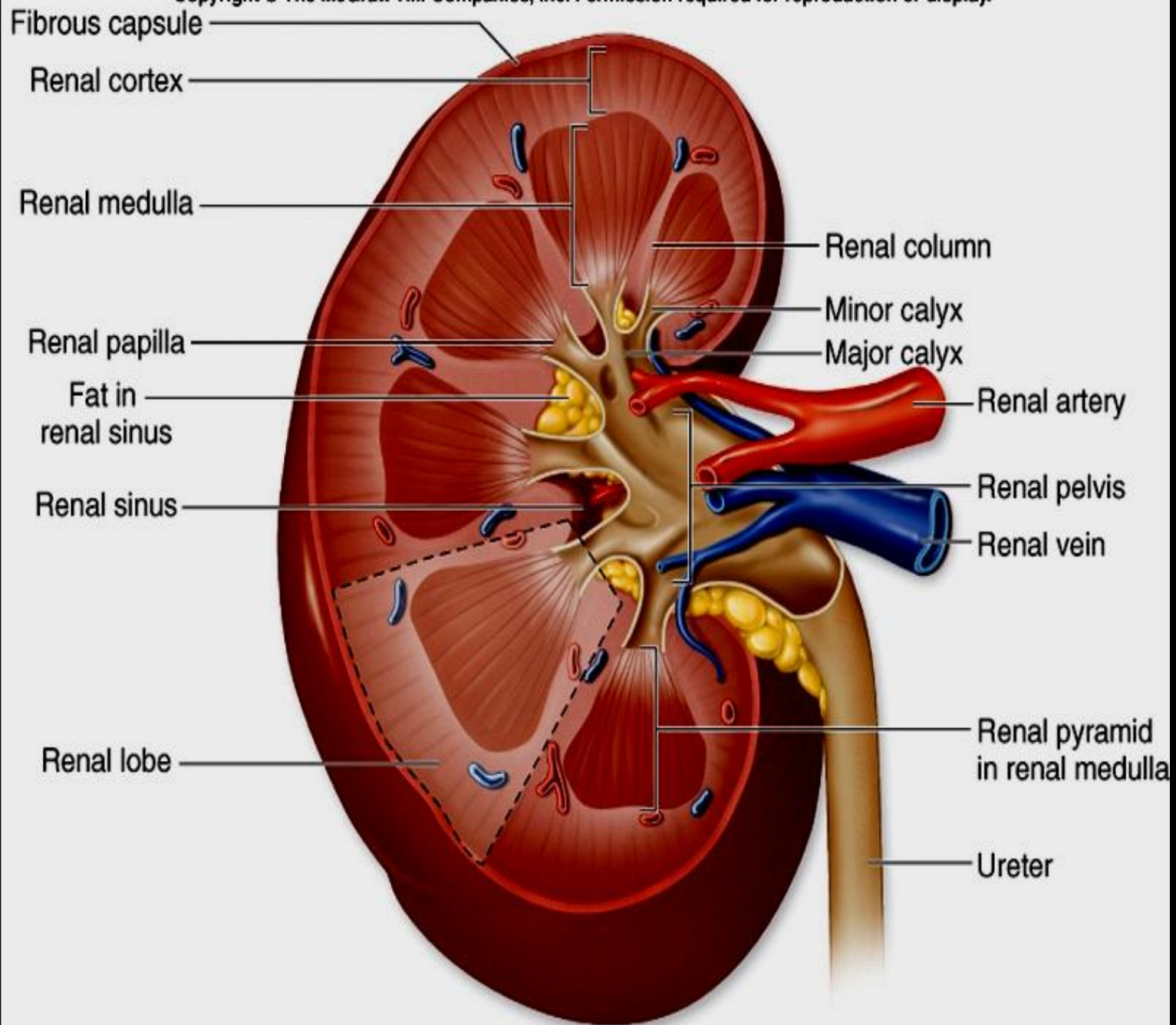
Renal artery

Renal vein

Renal pelvis

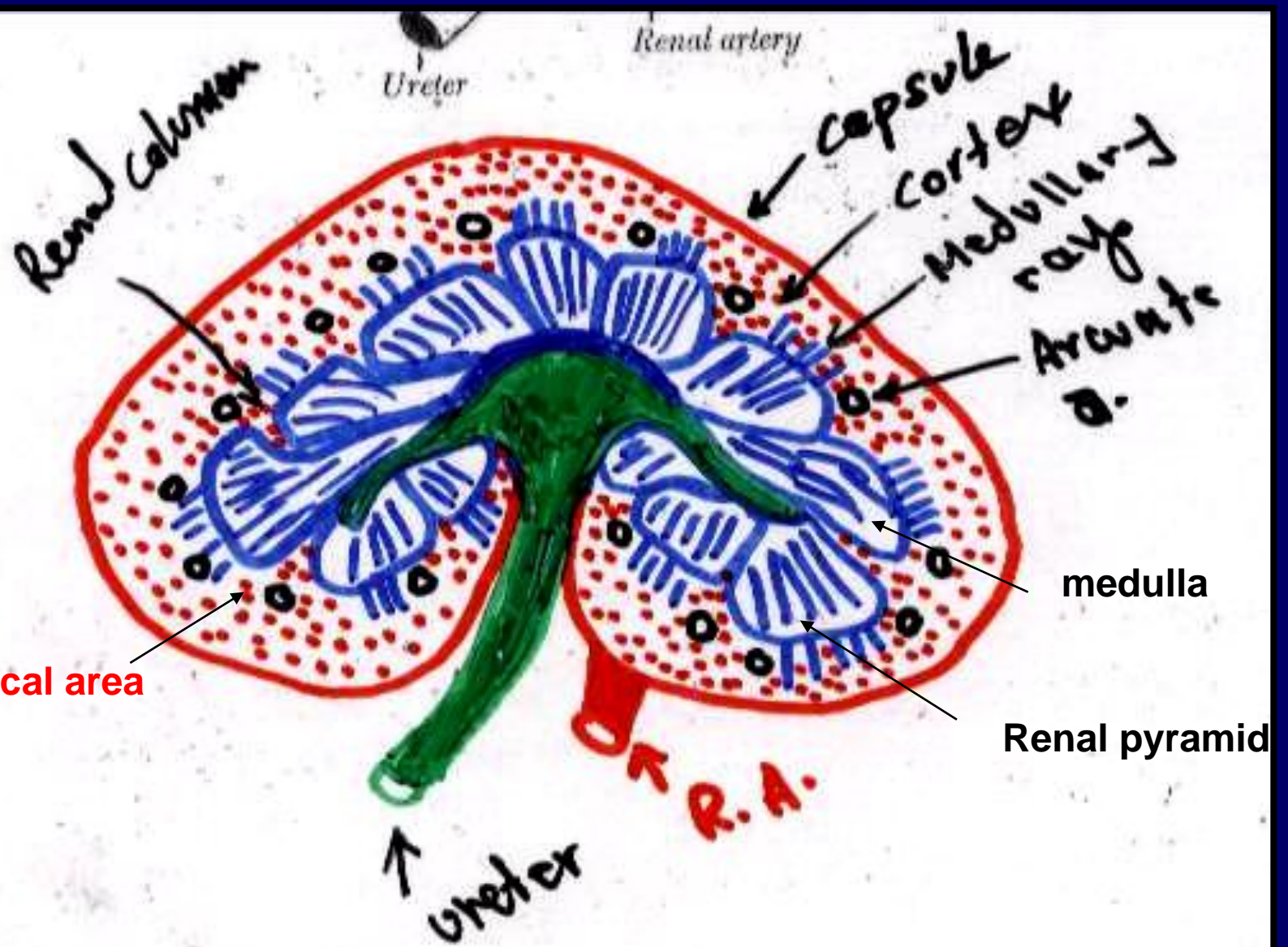
Ureter





**Right kidney, coronal section**









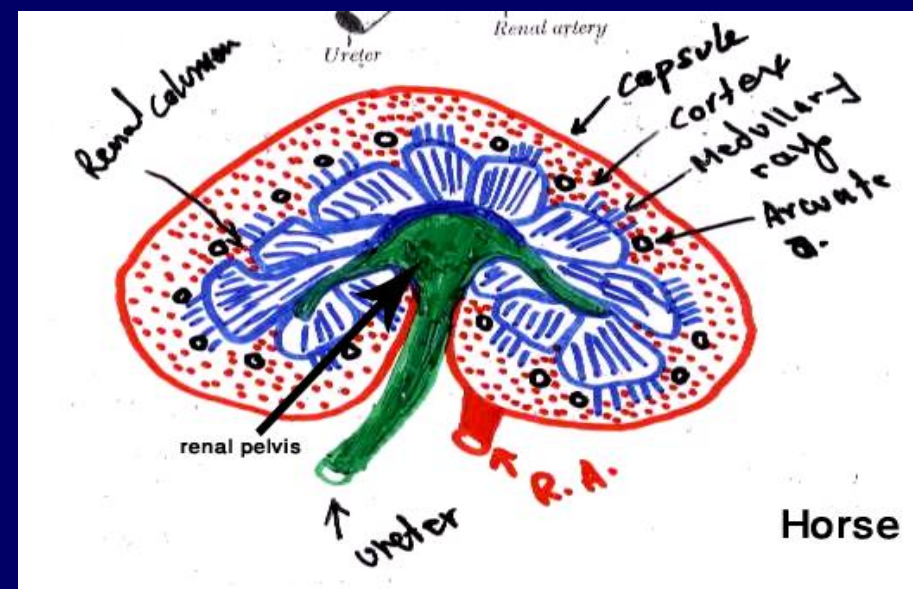
pig



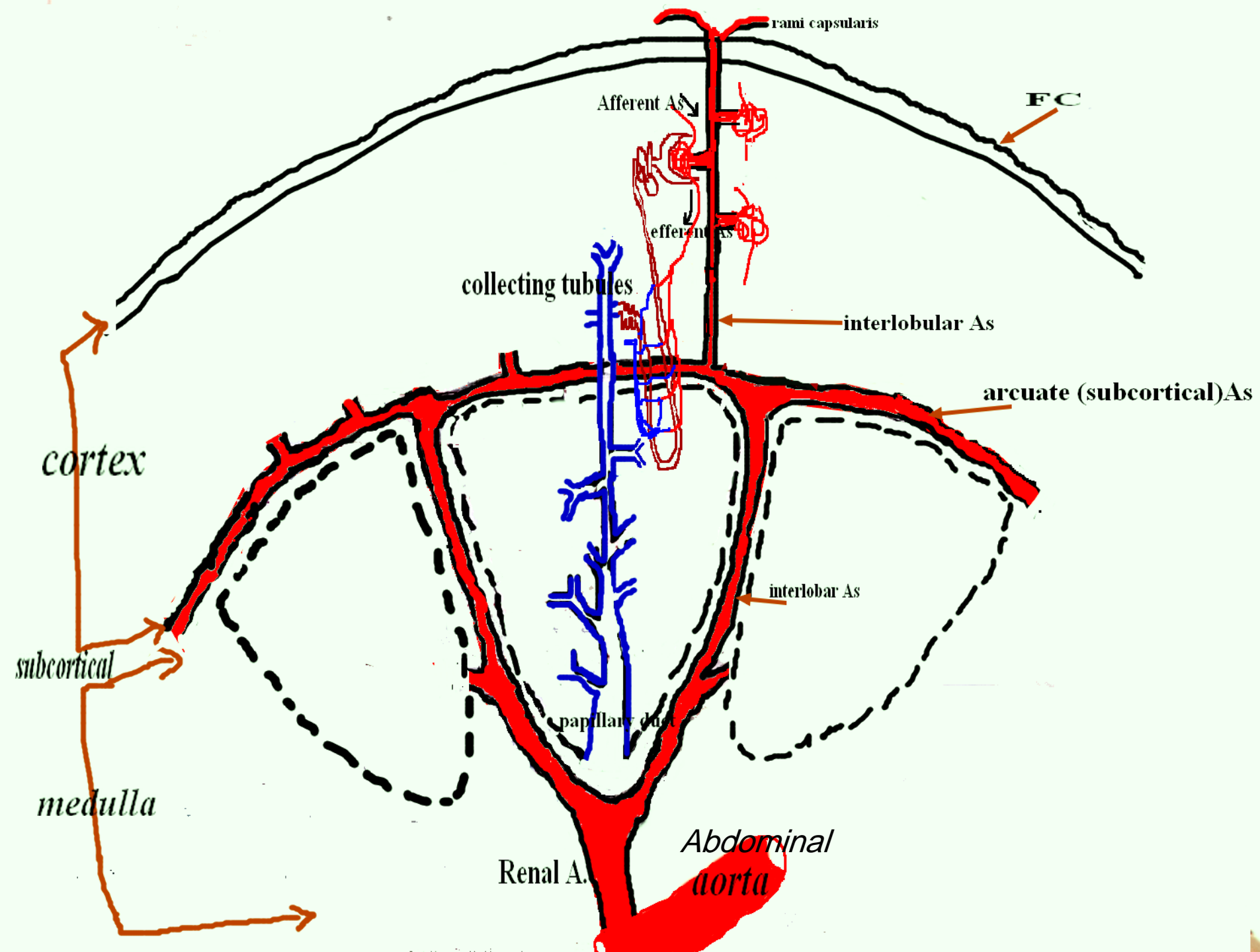
OX

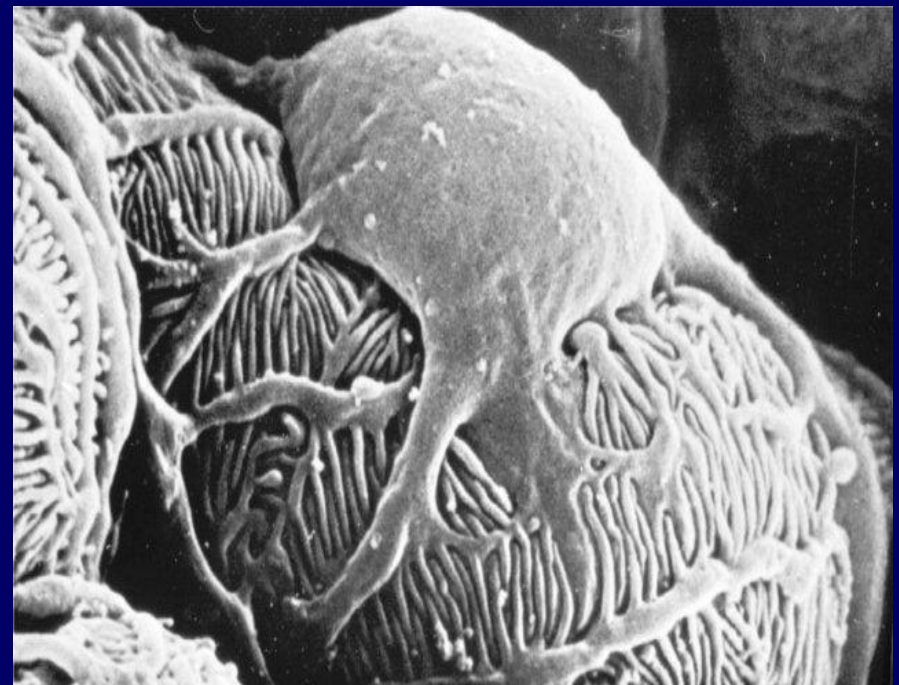
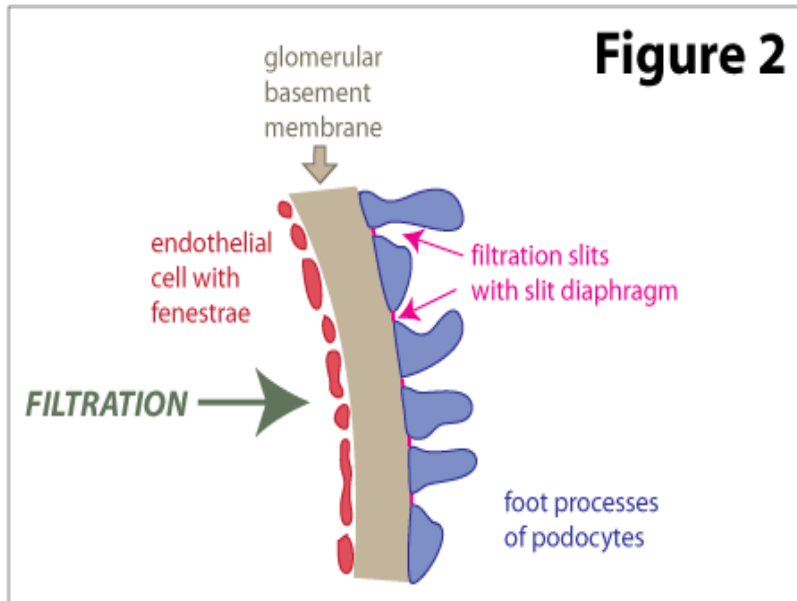
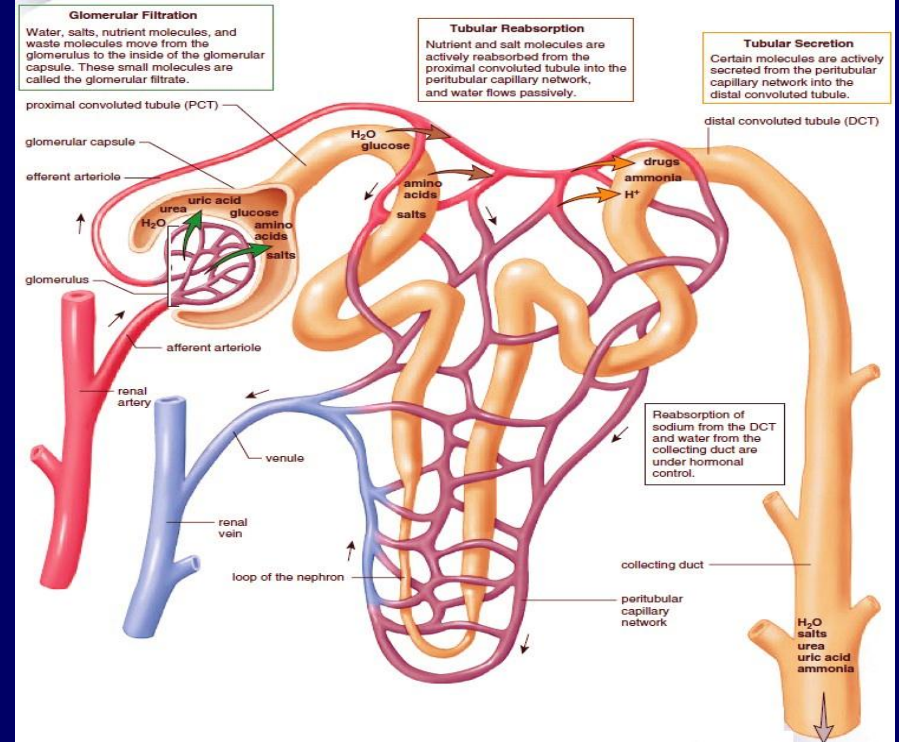
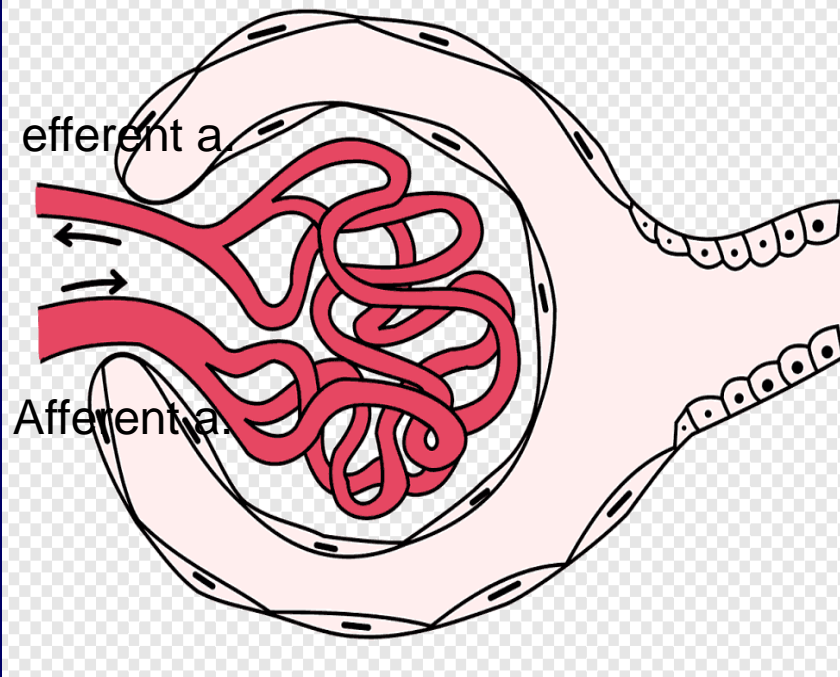


Dog & SR



Horse







### Glomerular Filtration

Water, salts, nutrient molecules, and waste molecules move from the glomerulus to the inside of the glomerular capsule. These small molecules are called the glomerular filtrate.

### Tubular Reabsorption

Nutrient and salt molecules are actively reabsorbed from the proximal convoluted tubule into the peritubular capillary network, and water flows passively.

### Tubular Secretion

Certain molecules are actively secreted from the peritubular capillary network into the distal convoluted tubule.

