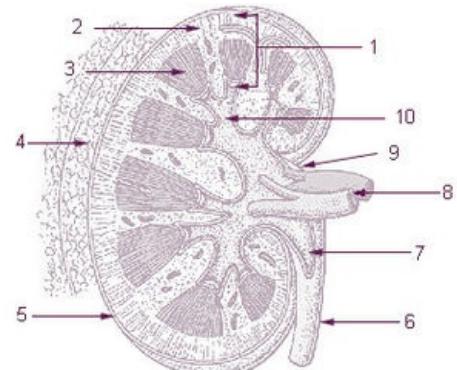


# Renal cortex

## Anatomy

The cortex of the kidney is lighter with a slight brown tinge, granular, has two layers:

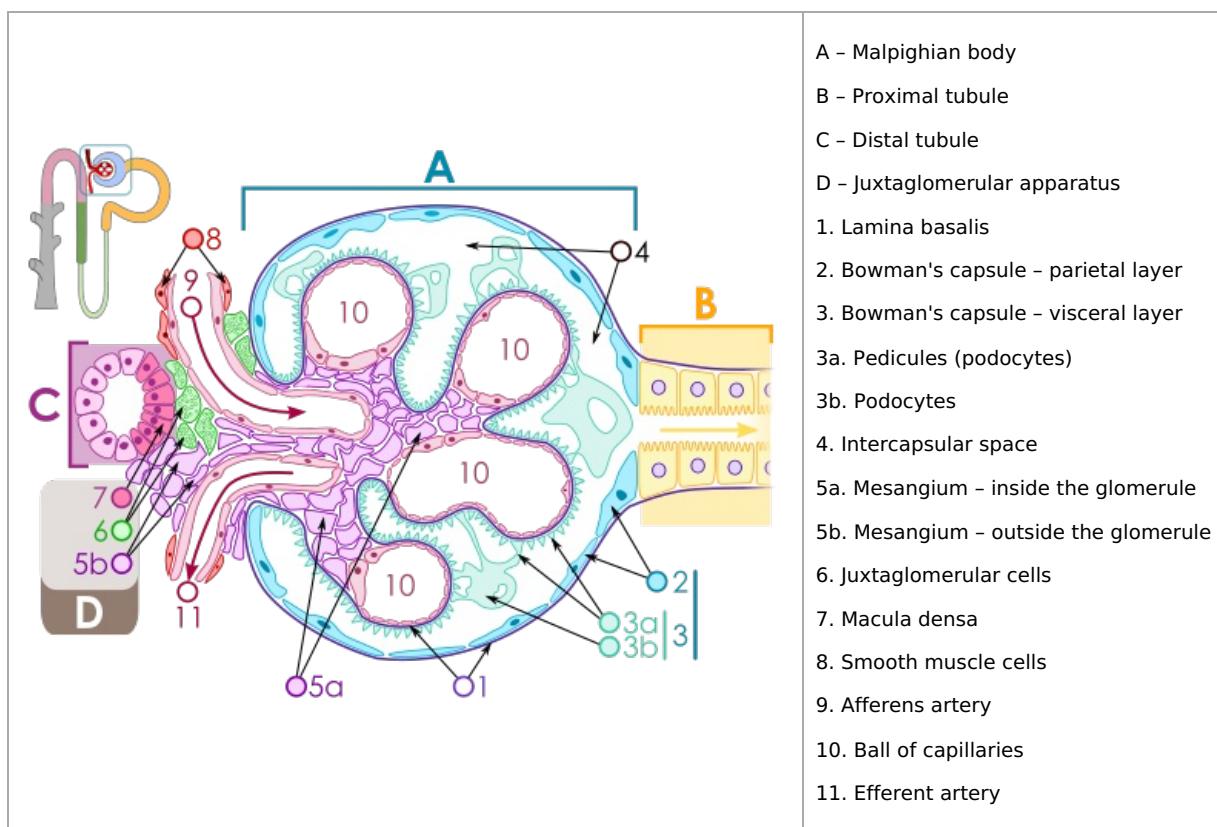
1. **outer layer** – forms the surface layer of the kidney parenchyma (0.5–1 cm);
2. **inner layer** – extends deeper into the parenchyma, is placed between **pyramides renales** in the form of columns – **columnae renales**.



Renalcortex (number 2)

## Histology

- **Malpighian body** – afferent and efferent arteries – fenestrated endothelium, continuous lamina basalis
- **Bowman's capsule**
  - **Parietal layer** – single-layered flat epithelium.
  - **Visceral layer** – podocytes placed on capillaries, pedicles and pedicules.
- **Proximal tubule** – it has *pars contorta* and *pars recta*.
  - Lateral interdigititation – indistinguishable boundaries between cells;
  - single-layer cubic epithelium with microvilli.
- **Distal tubule** – it has *pars contorta* and *pars recta*
  - Lateral interdigititation – indistinguishable borders between cells;
  - single-layer cubic epithelium with minimal amount of microvilli;
  - *juxtaglomerular apparatus* and *macula densa* (cylindrical) cells.



## Links

### Related articles

- Kidney
- Nephron

### Použitá literatura

- ČIHÁK, Radomír – GRIM, Miloš. *Anatomie*. 2. upr. a dopl edition. Praha : Grada Publishing, 2002. 470 pp. vol. 2. ISBN 80-247-0143-X.