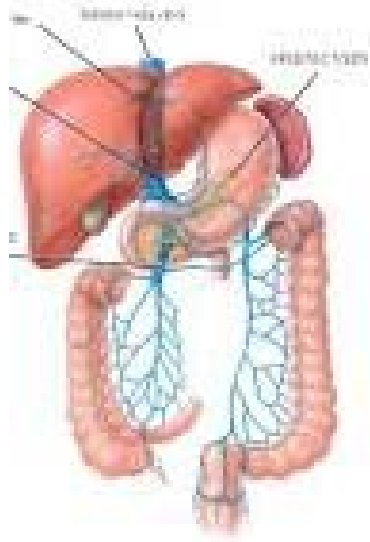


Histopathological Slits for Systemic Diseases

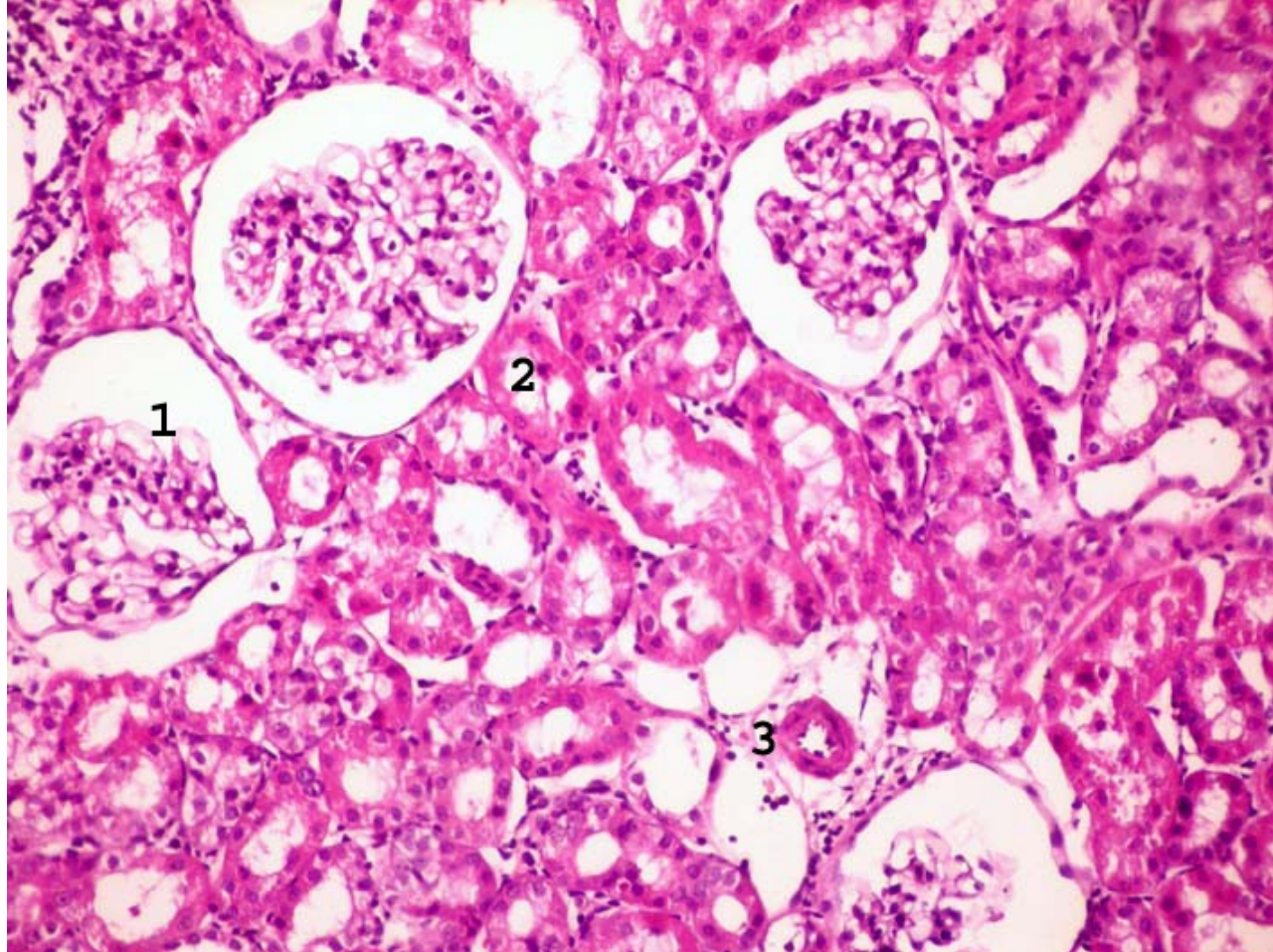


by

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Department
Faculty of Veterinary Medicine and South Valley University, Qena**

**Section of the 1st week
(Urinary system slits)**



Slit 1

Organ: Kidney (Cortex)

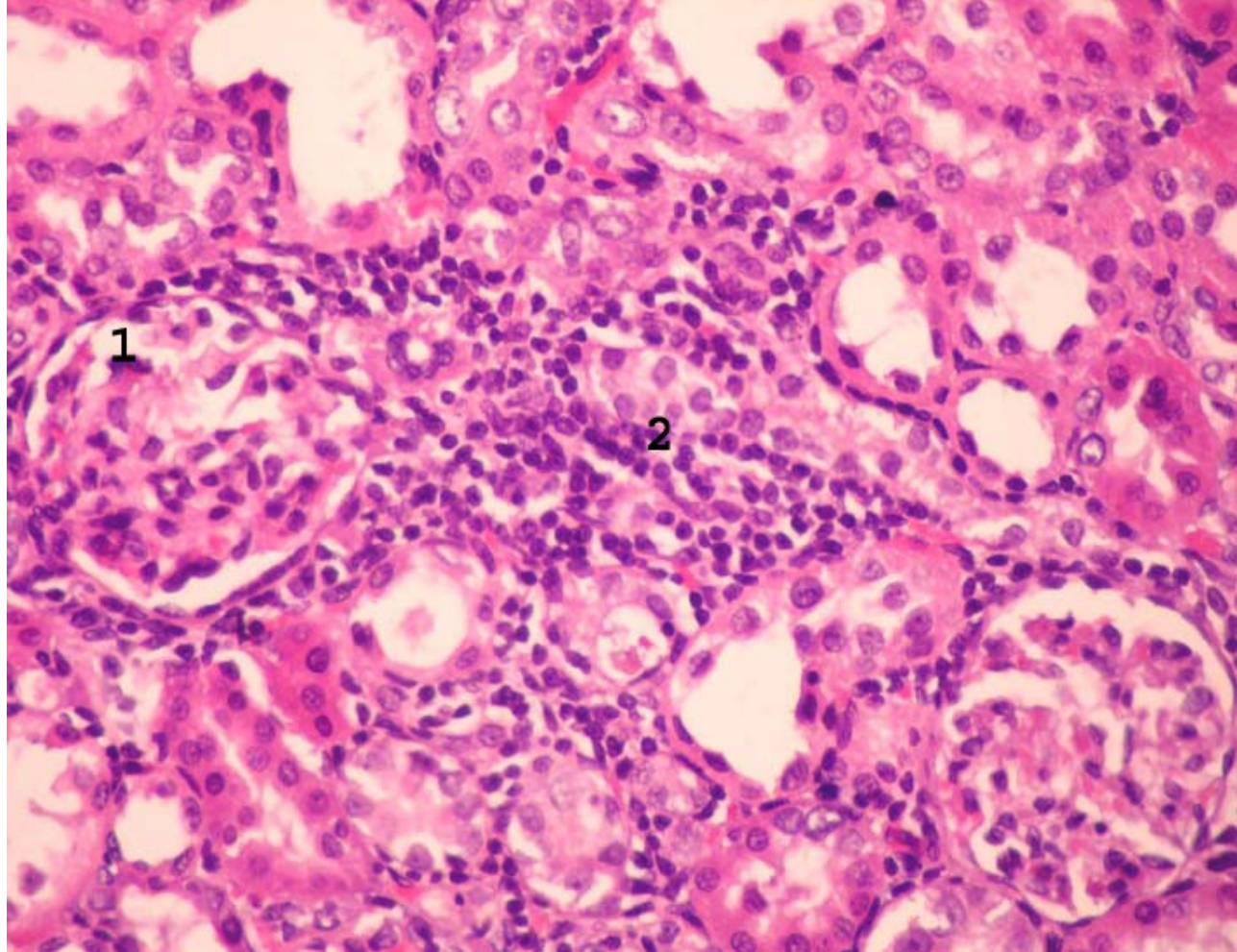
Stain: H&E

Diagnosis: **Membranous glomerulonephritis**

Microscopic appearance:

- 1- Extensive thickening and duplication of the glomerular basement membrane that appears as wire loop shape.
- 2- Necrotic and degenerative changes in cortical renal tubules.
- 3- Vasculitis (thickening in the wall and edema around it).

Slit 2



Organ: Kidney

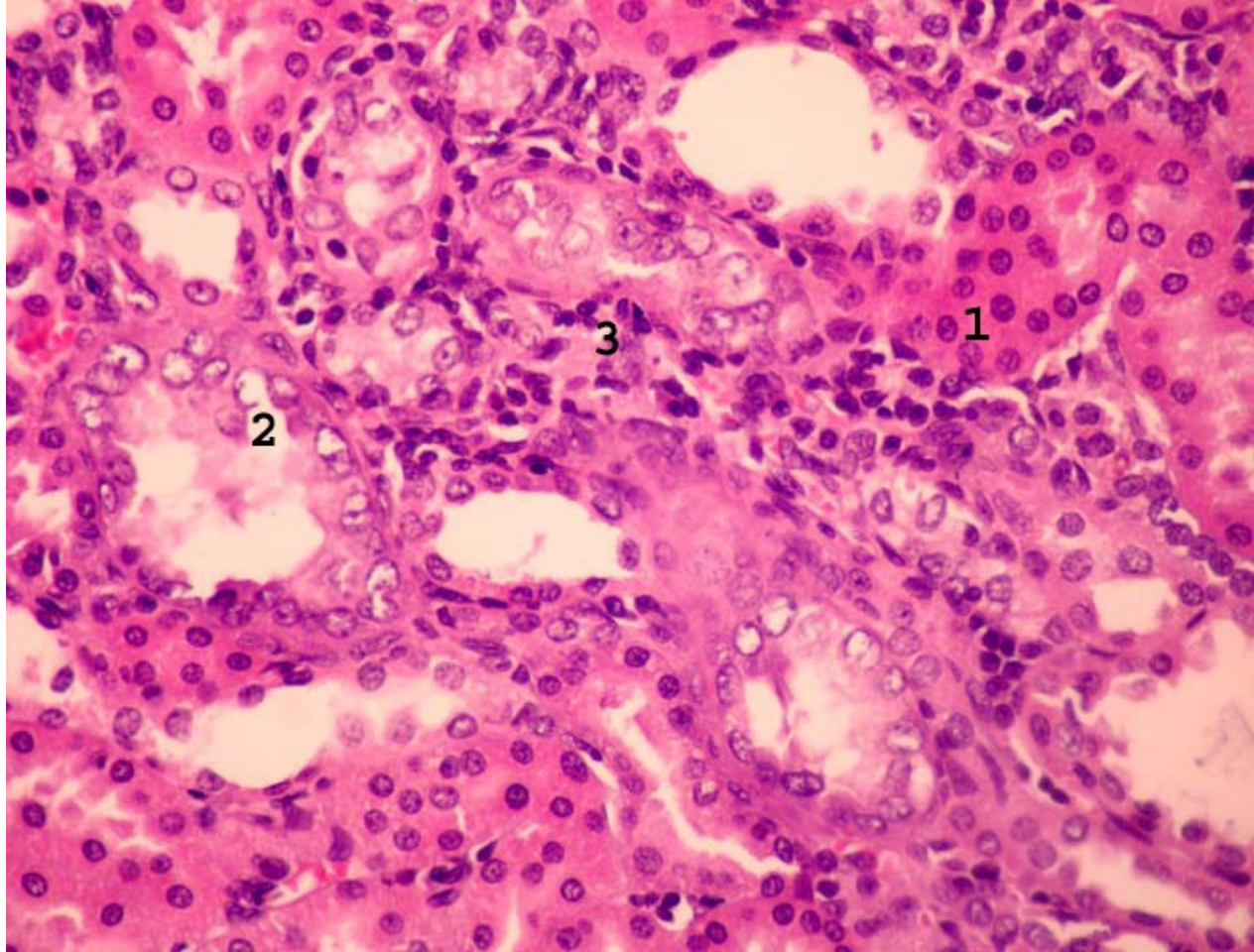
Stain: H&E

Diagnosis: **Chronic nephritis**

Microscopic appearance:

- 1- Glomerulitis characterized by hypercellularity with thickening in glomerular membrane and narrowing of bowman;s space.
- 2- Interstitial nephritis displayed aggregations of round cells with fibrous tissues were infiltrated the necrotic tubules.

Slit 3



Organ: Kidney (Cortex)

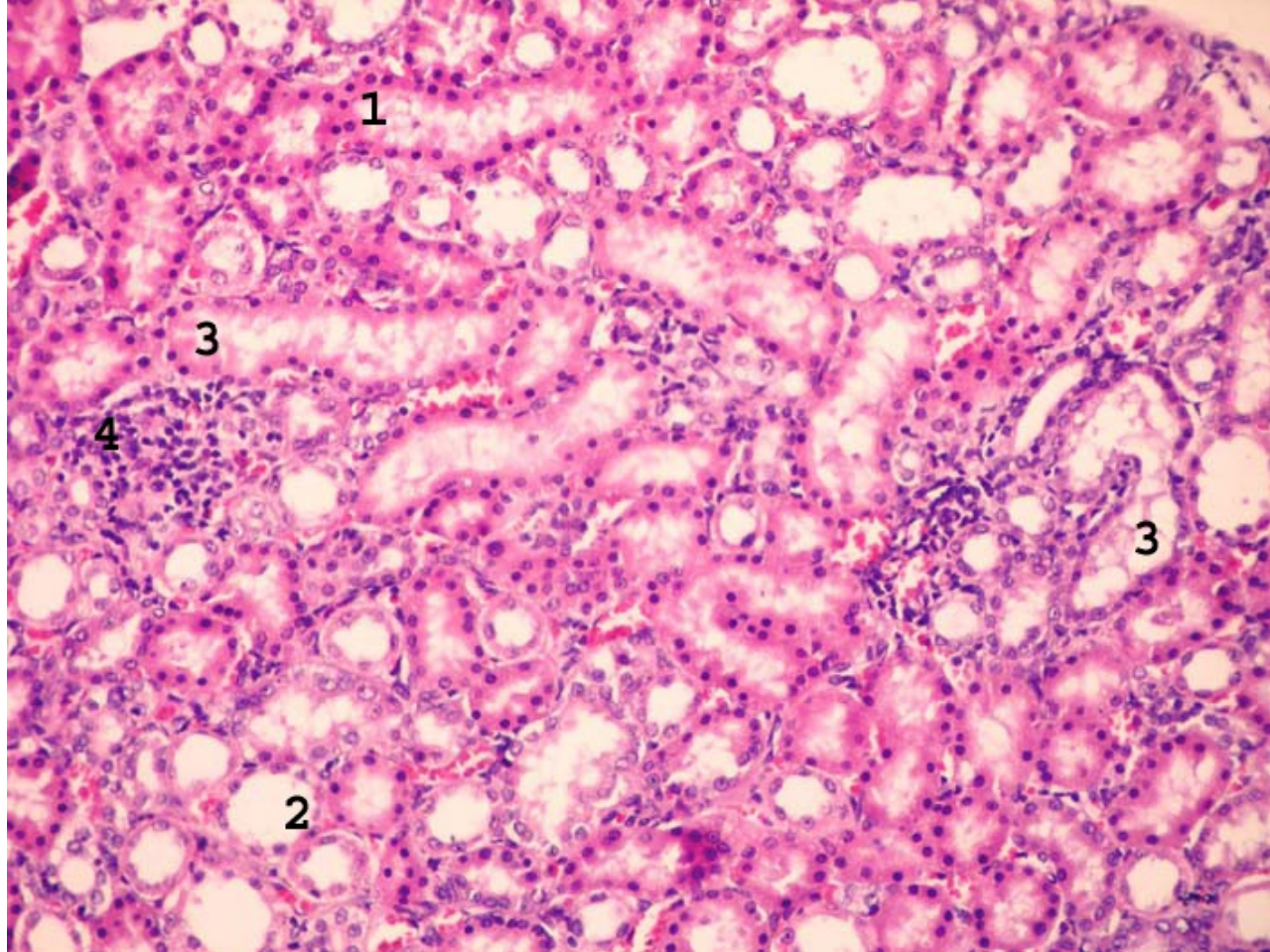
Stain: H&E

Diagnosis: **Chronic tubulointerstitial nephritis**

Microscopic appearance:

- 1- Necrosis and atrophy in renal cortex.
- 2- Dilation with vacuolation in renal epithelial cell and lumens in compensatory tubules.
- 3- Interstitial mononuclear cells with fibrous tissue proliferation encountered the atrophied tubules.

Slit 4



Organ: Kidney (cortex)

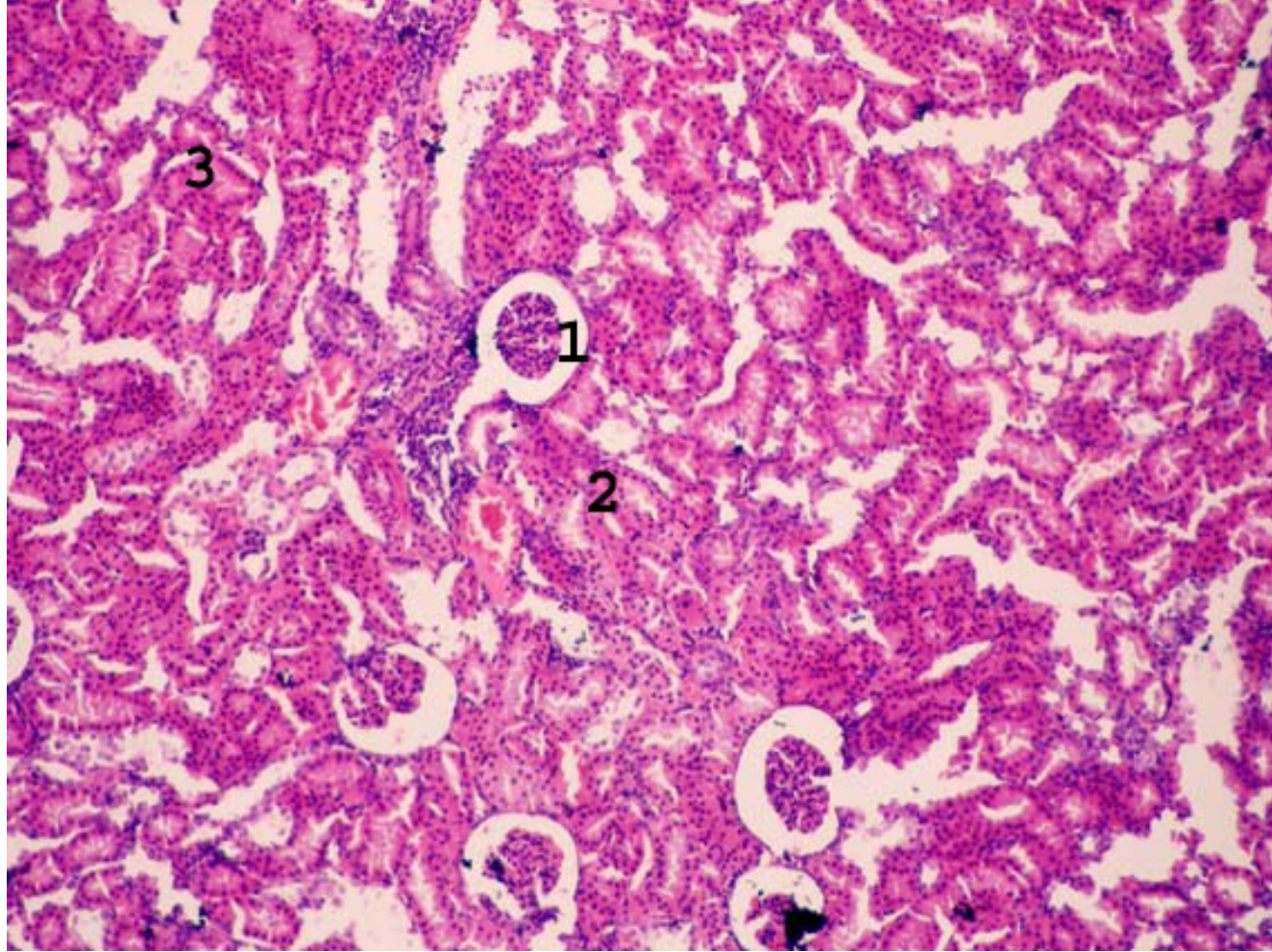
Stain: H&E

Diagnosis: **Acute tubular Necrosis**

Microscopic appearance:

- 1- Coagulative necrosis of epithelial cells lining the renal tubules.
- 2- Flattening of renal tubules due to dilation of lumen.
- 3- Intratubular obstruction due to cellular debris and albumen casts is evident

Slit 5



Organ: Kidney

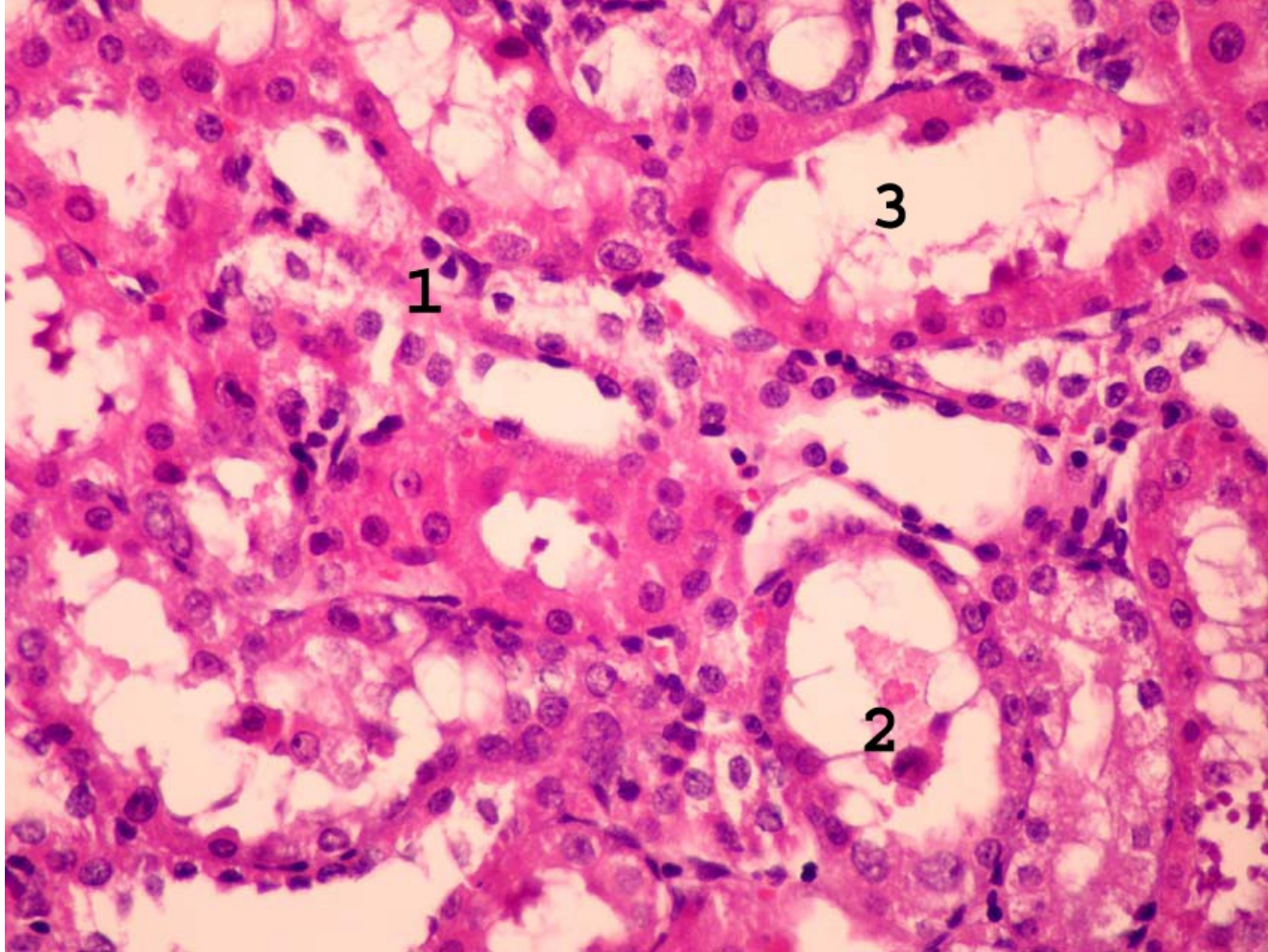
Stain: H&E

Diagnosis: **Renal impairment**

Microscopic appearance:

- 1- Dilation of Bowman's capsule with glomerular damage.
- 2- Tubular damage with formation of large spaces between them.
- 3- Obstruction of the tubules with inflammatory cell infiltration.

Slit 6



Organ: Kidney

Stain: H&E

Diagnosis: **Renal failure**

Microscopic appearance:

- 1- Severe necrosis, apoptosis and destruction in renal tubules (acute tubular necrosis).
- 2- Detached of renal epithelial cells inside the lumen lead to obstruction of lumen.
- 3- Dilation of lumen of renal tubules.
- 4-focal areas of inflammatory cells