Urinary System

Overview of the Urinary System

General Structure of the Kidney

The Nephron

Filtration apparatus of the Kidney

Histophysiology of the Kidney
Ureter, Urinary bladder and Urethra

• These are hollow organs with similar histology.
• Their walls are composed of a mucosa consisting of specialized transitional epithelium, that rest on a lamina propria of collagenous tissue, a muscularis consisting of two to three layers of longitudinal and circular smooth muscle, and adventitia made up of loose connective tissue.

Urethra

• Duct connecting the urinary bladder and the exterior of the body.
• Composed of three layers: a mucosa, a muscularis, and an adventitia.
• Urethra of female is short (about 3 cm long) and that of the male is long (about 20 cm long)
• Many differences exist between the female and the male.

Histopathology of the Urinary Tract
(Malignant Tumors of the Urinary Tracts)

• Adnocarcinoma of the Kidney (Renal Cell Carcinoma, hypernephroma).
• Carcinoma of the Urinary