

МОРФОФУНКЦИОНАЛЬНЫЕ ОСОБЕННОСТИ СТРОЕНИЯ ПОЧЕК

Гранина Е. В., Зурашвили А. Д.

Харьковский национальный медицинский университет

Харьков, Украина

MORPHOFUNCTIONAL STRUCTURAL FEATURES OF KIDNEY

Ghranyna E.V., Zurashvili A. D.

Kharkiv National Medical University,

Kharkiv, Ukraine

In humans, the kidneys are on both sides of the spine at the level of the middle- thoracic XI to the top edge of the lumbar vertebrae III. The right kidney is located slightly lower the left one. Kidney (ren) – is a paired excretory organ, which secretes urine, it takes part in the regulation of water and electrolyte balance, support acid-base balance, allocation of nitrogenous compounds, maintaining osmotic pressure of body fluids, blood pressure regulation. Kidney has smooth surface of the kidney a bean-shaped, length of each kidney is 10-12 cm, weight - 150-160 gr. Top of kidney covered with dense connective tissue capsule. In the middle section there renal gate - depressions in which flow into the renal artery and nerves, and leave the renal vein, lymphatic ducts and ureters. Kidney fixed using fat capsule, fascia, and intra-abdominal pressure. In kidney tissues secrete two layers: the outer - cortex and inner - the medulla. Structural and functional unit of the kidney is the nephron. In both human kidneys there are about two million nephrons. In nephron there are (Malpighian) body, consisting of two layers of the glomerular capsule (capsule Shumlyanskiy - Bowman) and systems of tubules of the nephron. From the capsule departs glomerular renal tubule, which is in the cortex is the proximal part of the nephron tubule and enters the nephron loop (loop of Henle). In the loop there are ascending and descending parts. Ascending part goes to the distal tubule of the nephron, which flows into the renal collecting ducts. Several collecting ducts fall into the papillary ducts opening into the kidney cup. Kidneys per minute pump through itself about 1 liter of blood, filter off decomposition products, toxins and wastes, and then the plasma direct it to the ureters, the bladder, from which they are derived. Through the human kidney passes more than 200 liters of blood per night.

