25. INDIVIDUAL FEATURES OF TOPOGRAPHY AND STRUCTURE OF THE ILIOINGUINAL AND GENITOFEMORAL NERVES

Author: Marina Peicova

Scientific adviser: Olga Belic, PhD, Associate Professor, Department of Anatomy and Clinical Anatomy, *Nicolae Testemitanu* State University of Medicine and Pharmacy of the Republic of Moldova.

Introduction. The lumbar plexus includes the ilioinguinal and genitofemoral nerves. Knowledge of the individual topography features and structure of these nerves is necessary in regional anesthesiology to perform successful blockades, in neurology to establish the correct diagnosis, and in neurosurgery for effective surgical interventions.

Case presentation. The preparation method was used to study the structure and individual variants of the topography of the ilioinguinal and genitofemoral nerves on the corpse of a man. The ilioinguinal nerve had an unusual origin and course. On the left side, the nerve went out to the anterior surface of the psoas major muscle, piercing its more lateral to the exit point of the genitofemoral nerve, at the level of the aortic bifurcation. Descending, it entered the inguinal canal, accompanied by the testicular artery trunk. The left venous vessel emerged from the deep ring and rose upwards, flowing into the renal vein. On the right side, the ilioinguinal nerve appeared between the trunk of the inferior vena cava and the aorta. The nerve broke up into small bundles, which reconnected in its lower part to form the nerve trunk. The ilioinguinal nerve went down, crossing the right testicular vein and descending along the anterior surface of the inferior vena cava, and entered the deep ring of the inguinal canal. The right testicular vein emerged from the inguinal canal, flowing into the inferior vena cava, at the level of the ilioinguinal nerve appearance. The genitofemoral nerve descended laterally down the anterior surface of the psoas major muscle, splitting into the genital and femoral branches. The genital branch entered the deep ring of the inguinal canal. In the inguinal canal the genital branch of the genitofemoral nerve and the ilioinguinal nerve were located behind the spermatic cord, innervating the formations of the inguinal canal.

Discussion. According to various authors, nerves may have an unusual onset and course, and in some cases be absent entirely. P Bachul et al. indicated the absence of the left ilioinguinal nerve. The genital branch of the left genitofemoral nerve appeared higher than usual and supplied the groin region that is normally innervated by the ilioinguinal nerve. Robert Haładaj et al. described the absence of the genital branch of the right genitofemoral nerve of the corpse of a man and its replacement by branches of the right lateral cutaneous nerve. The femoral branch at the same time retains the classical course. The author also noted cases of absence of branches of the lateral cutaneous nerve and their replacement by the genital branch of the genitofemoral nerve.

Conclusion. The topography and structure of the lumbar plexus branches are variable. They may depend on gender and individual body size. This is important to consider in order to prevent complications during surgical interventions in this area.