treated adult cadavers, selected from the Department of Human Anatomy of *Nicolae Testemitanu* State University of Medicine and Pharmacy. By anatomical dissection method the formation of UL nerves, their interconnections, topography and relation to the accompanying arteries, as well as the existent variations were evaluated.

Results. Anatomical variations were identified in 6 UL, 4 of them were male (3 right upper limbs and 1 left upper limb) and 2 female (both right upper limbs). Variations of median nerve (MN) formation were identified on 2 UL (both male, right upper limbs); in the first case MN was formed by three roots, coming from the three cords of BP, and in the second case - it was formed by a single root that started from the medial cord of the plexus. On one left UL of a male, an abnormal relationship of MN with axillary artery (AA) was determined; it was formed from its usual roots, but posterior to AA, and continued to run on the arm lateral to the brachial artery until the cubital fossa, where MN crossed it anteriorly and lied medial to it. On one right UL of a female, the formation of the ulnar nerve from the lateral cord of the BP was established; it passed below the biceps brachii muscle and reached the medial bicipital groove in the middle 1/3 of the arm, after which it passed posterior to the medial epicondyle of the humerus, and then on the forearm to continue its classic path. Variations of connection of BP nerves were found on 2 right UL (one of each gender); in one case the connection between the axillary and radial nerves was identified, and in another case – the connection between the median and musculocutaneous nerves was identified.

Conclusions. More often, the right male upper limbs are exposed to variations of the median nerve.

Key words: brachial plexus, anatomical variations

254. CONJOINED TWINS – MORPHOCLINICAL ASPECTS

Author: **Inga Rurac**
Scientific adviser: Ilia Catereniuc, MD, PhD, University Professor, Human Anatomy Department , *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction. One of the most interesting and hard to manage congenital malformations refers to legendary conjoined twins. This abnormality has a rare occurrence in medical practice. Frequently, the twins are born dead, but there are few cases when they survive. Current technology is lending a helping hand in the early diagnosis of these conditions. More commonly known as „Siamese twins", this phenomenon is shrouded in mystery and considered a curiosity by general public. The cause of conjoined twins is unknown. Two theories have been postulated to explain the origin of this phenomenon: the *fission* and the *fusion* theories. Until now, more than 250 separation surgeries have taken place around the world and with very rare incidence of successful separation surgery as per the current literature available.

Aim of the study. To analyze the history, epidemiology, etiology, diagnosis, management and other morphoclinical aspects of conjoined twins.

Materials and methods. Scientific articles were selected from PubMed, Hinari and Cambridge University press databases. The research was not delimited to a specific period of time and was supplemented with bibliographic data from statistic sites, of the Ministry of Health, Labour and Social Protection of the Republic of Moldova, and the exhibits of the Anatomic Museum of *Nicolae Testemițanu* State University of Medicine and Pharmacy were analyzed.

Results. The statistical analysis of the incidence and mortality for congenital malformations, chromosomal deformities and abnormalities of children under 18 in the Republic of Moldova for the years 2008-2018 has shown a peak in 2011-2012 years. Unfortunately, the rarity of the disease impede continuous improvements in diagnostic, management and separation techniques, so each case is an opportunity to introduce new techniques and methods to help in achieving the best possible results.
Conclusions. Further work in epidemiology and molecular research is necessary to realize the etiology and pathogenesis involved in the development of this strange phenomenon of nature. Quick interventions geared toward rapid diagnosis and management should be implemented to help decrease maternal and neonatal morbidity and mortality. The evaluation of these children should be multidisciplinary, involving mainly obstetricians, pediatric anesthesiologists and pediatric surgeons.
Key words: twins, conjoined twins, Siamese twins

255. MORPHOCLINICAL ASPECTS OF KIMMERLE'S ANOMALY

Author: **Florin Teterea**
Scientific adviser: Ilia Catereniuc, MD, PhD, University Professor, Human Anatomy Department, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction. Knowledge of the morphological abnormalities of the atlas (C1) is essential in clinical studies. The complete or partial ossification of the posterior atlanto-occipital ligament, that connects the posterolateral edge of the superior articular facet of the atlas with the superior surface of the posterior arch of C1, is called Kimmerle's anomaly (KA). Clinically KA is associated with Barré-Liéou syndrome, but sometimes, even if present, it can show no symptoms.
Aim of the study. Investigation of KA types and their prevalence depending on gender and age of the patient.
Materials and methods. This study was carried out on 145 lateral X-rays images of the cervical region of the vertebral column in patients aged between 12-88 years, in some patients KA was present in others absent, and 57 CT 3D reconstructed images of patients only with KA, aged 19-79 years, were examined. The selected images did not contain any other pathological changes of the C1. The data were analyzed by frequency analysis of occurrence and type of KA, logarithmic trend line, Pearson's $\chi 2$ test (p-value for the test to be statistically significant is 0.05).
Results. On the X-rays images, KA was present in 28.95% of cases. The prevalence of KA among males was 13.1% and in females – 15.85% , that statistically is insignificant ($\chi 2$ (2, N=145) = 0.64, p=0.73). On CT 3D reconstructed images, KA in females was established in 56.14% of cases and in males in 43.86% of cases. Considering both imaging studies (99 cases with KA), the prevalence of the complete KA (65.66%) and incomplete (34.34%) was statistically insignificant for both genders ($\chi 2$ (1, n=99) = 0.22, p=0.64). The two types of KA can be present at any age independent of gender (all R2 values according to the logarithmic trend line were between 0.01-0.55). The average age for revealed KA was 47.21 years. The morphological structures of KA more detailed were observed on CT 3D reconstructed images, due to the possibility to see: the thickness of the bone bridge, the shape and the dimensions of the foramen, the unilateral, or bilateral position, the starting place of the osteophyte.