МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ

М А Т Е Р І А Л И

106-ї підсумкової науково-практичної конференції
з міжнародною участю
професорсько-викладацького колективу
БУКОВИНСЬКОГО ДЕРЖАВНОГО МЕДИЧНОГО УНІВЕРСИТЕТУ
03, 05, 10 лютого 2025 року

Конференція внесена до Реєстру заходів безперервного професійного розвитку, які проводитимуться у 2025 році №1005249

Чернівці – 2025

УДК 61(063)
М 34

Матеріали підсумкової 106-ї науково-практичної конференції з міжнародною участю професорсько-викладацького колективу Буковинського державного медичного університету (м. Чернівці, 03, 05, 10 лютого 2025 р.) – Чернівці: Медуніверситет, 2025. – 450 с. іл.

У збірнику представлені матеріали 106-ї науково-практичної конференції з міжнародною участю професорсько-викладацького колективу Буковинського державного медичного університету (м. Чернівці, 03, 05, 10 лютого 2025 р.) зі стилістикою та орфографією у авторській редакції. Публікації присвячені актуальним проблемам фундаментальної, теоретичної та клінічної медицини.

ISBN 978-617-519-135-4

Results. The examination of fetuses of 4-6 months of development found certain peculiarities of the structure, syntopy and topography of the uterus. 5 out of 30 fetuses had insignificant deviation of the uterine vertical axis in the frontal plane to the right. The degree of this deviation is likely to depend on the interrelation of lengths of the uterine round ligaments. Thus, in 5 cases the right uterine round ligament in fetuses of 4-6 months was shorter than the left one. An average length of the right uterine round ligament was 6,5 mm, of the left one – 7,1 mm. As to the deviation in the sagittal plane, the positions anteflexio or retroflexio were difficult to identify. In all the cases the uterus was in the intermediate position. Syntopically, in all the cases the uterus touched the anterior wall of the rectum with its posterior surface, and the posterior surface of the urinary bladder – with its anterior surface. Umbilical arteries passed from the sides at 1 mm distance. The ovaries were characterized by the biggest variety of syntopic interrelations with the uterus. In the majority of early fetuses – 8 out of 10 fetuses of the 4th month of development – the ovaries were in high position and touched the posterior surface of the uterus with their lower extremities. The high position was characterized by the ovarian localization either longitudinally the lateral walls of the rectum or in the femoral regions. In 2 cases in 4-month fetuses the ovaries were located behind the uterus by their bigger part. This position was present in the majority of fetuses of the 6th month of development. The uterus shape, or to be more precise, the shape of the uterine floor was characterized by the biggest variety of morphological signs. In 26 fetuses out of 30 the uterus was flat, from 1 to 2,5 mm thick. In 4 fetuses the uterus was of the shape close to the triangle. The uterine floor of 4-month fetuses was characterized by the following shapes: flat – 2 cases, convex – 1 case, channel – 5, tuberose – 2. In half of the cases of 4-month fetuses (5 out of 10) the uterine floor was of a channel shape.

Conclusions. Morphologically the uterine floor shape in the second trimester changes from the channel one on the 4th month of development to the flat one on the 6th. Changes of topography and syntopy are indicative of gradual descending of the uterine tubes and ovaries. In all the cases the position of the uterine body, both anteflexio or retroflexio, was not possible to detect.

Protsak T.V.

TOPOGRAPHICAL AND ANATOMICAL FEATURES OF THE SUPERIOR SINUSES IN ELDERLY AND OLD PEOPLE

Mykola Turkevych Department of Human Anatomy
Bukovinian State Medical University

Introduction. The increase in the number of diseases of the nose and sinuses in recent years has generated natural scientific interest in this topic, forcing scientists to find new approaches to diagnosis and treatment, as well as improve existing ones.

The aim of the study. To find out the development of the maxillary sinuses in elderly and old people.

Materials and methods. A study of the topographic and anatomical features of the maxillary sinuses was carried out on 26 preparations of the upper jaws, skulls and sections of the heads of corpses of elderly and senile people using the methods of preparation, morphometry, and radiography.

Results. In the old and senile period of human ontogenesis, the maxillary sinus is the most pronounced cavity and is located in the body of the upper jaw. It has the shape of an irregular quadrangular pyramid, the base of which is formed by the lateral wall of the nasal cavity, with the zygomatic process of the maxillary bone as its apex, and is limited by the anterior, upper, posterior, middle and lower walls.

The anterior wall of the maxillary sinus is located between the infraorbital margin of the orbit and the cellular process of the maxilla. It is covered with the cheek. On the outer surface of the bone wall under the infraorbital foramen there was a canine fossa, the depth of which was 5.2-8.3 mm. The height of the anterior wall of the sinus was 27.0-35.0 mm. Its transverse size ranged from 18 mm to 23 mm.

The upper wall of the maxillary sinus is formed by the orbital surface of the maxillary bone, which is also the lower wall of the orbit. The middle edge of the sinus was projectively located on the border between the inner edge of the lower and middle walls of the eye fossa. Its lateral edge topographically corresponded to the inferior orbital fissure in 20 specimens (80 %).

The posterior wall of the maxillary sinus topographically corresponded to the maxillary hill. In 22 specimens (88 %), the sinus was adjacent to the posterior cells of the ethmoidal labyrinth with its posterosuperior edge. In one specimen (4 %) it was located at the wall of the sphenoid sinus. The lower wall of the maxillary sinus is formed by the cellular process of the maxilla. Depending on the pneumatization, its bottom was at different levels relative to the lower wall of the nasal cavity.

The middle (nasal) surface of the maxillary sinus simultaneously formed part of the lateral wall of the nasal cavity. In the thickness of its anterior section there was a nasolacrimal canal, which ended in the lower nasal passage under the inferior nasal concha. The spongy substance decreases sharply. The height of the maxillary sinus ranged from 27.0 mm to 37.0 mm, the width from 21.0 mm to 26.0 mm, and the anteroposterior dimension from 27.5 mm to 33.0 mm.

Based on radiological data, we can conclude that in elderly people thinning of the walls of the maxillary sinuses can be observed more frequently than in middle-aged people: the latter ones suffer from thinning of the walls of the maxillary sinuses in more than 1/2 of cases, and the elderly - in 3/4 cases. The average height of the sinuses for the age group is 35.2 mm, the width on the right is 27 mm, on the left is 25.5 mm and the depth is 44 mm.

At the end of the old period, there is a decrease in the height of the sinuses by 0.7 mm, reaching an average of 34.5 mm; sinus depth – 42.0 mm and width – 25.2 mm. In 1/5 cases, the level of the sinus floor was higher than the bottom of the nasal cavity. Within this age group, cases with foci of osteoporosis in the zygomatic process of the upper jaw are almost twice as common. In half of the cases, unusually wide sinuses are found – 27 mm.

Conclusions. Based on the complex of carried out morphological research methods, it has been established that during elderly and senile age reverse processes of human ontogenesis occur, involutive changes occur in the walls of the maxillary sinuses.

Savka I.H.

IMPLEMENTATION OF MODERN THREE-DIMENSIONAL MODELING METHODS IN THE PROCESS OF FORENSIC MEDICAL INVESTIGATION OF GUNSHOT INJURIES CAUSED BY MEDIUM CALIBER AUTOMATIC FIREARMS

Department of Forensic Medicine and Medical Law
Bukovinian State Medical University

Introduction. We draw attention to three-dimensional (3D) modelling, which current researchers are increasingly incorporating into the forensic medical examination process of firearm injuries.

The aim of the study. To implement the three-dimensional spatial reconstruction of gunshot injuries into the process of their forensic investigation by studying morphological signs of injuries, caused by medium caliber automatic firearms (Czech CZ83 automatic pistol).

Material and methods. We used the Czech CZ83 automatic pistol loaded with 7.65×17mm browning as a medium caliber firearm. The ballistic clay Roma Plastilina No. 1, manufactured in the USA for bench ballistic tests, was used as a target and a gunshot trace reconstructing material. The series of experiments consisted of 15 gunshots; then the main morphological elements of the skin wound, subcutaneous adipose tissue of the pig and the entry, middle and exit wound channels were investigated, i.e. they were photographed, subjected to photogrammetry and converted into the three-dimensional format with the help of graphic design software “Agisoft PhotoScan” and “3ds max”.

Results. The obtained results were grouped, subjected to statistical treatment, comparative analysis and discussion. There were detected direct moderate correlations (with a value of 0.54, $p=0.03$) between the initial velocity, kinetic and specific energy and the diameter of the exit wound