МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»

М А Т Е Р І А Л И

105-ї підсумкової науково-практичної конференції
з міжнародною участю
професорсько-викладацького персоналу
БУКОВИНСЬКОГО ДЕРЖАВНОГО МЕДИЧНОГО УНІВЕРСИТЕТУ
присвяченої 80-річчю БДМУ
05, 07, 12 лютого 2024 року

Конференція внесена до Реєстру заходів безперервного професійного розвитку, які проводитимуться у 2024 році № 3700679

Чернівці – 2024

УДК 001:378.12(477.85)
ББК 72:74.58
М 34

Матеріали підсумкової 105-ї науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) – Чернівці: Медуніверситет, 2024. – 477 с. іл.

ББК 72:74.58

У збірнику представлені матеріали 105-ї підсумкової науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) із стилістикою та орфографією у авторській редакції. Публікації присвячені актуальним проблемам фундаментальної, теоретичної та клінічної медицини.

ISBN 978-617-519-077-7

structure of the liver is created as a result of the complex correlative relationships of vessels, mesenchyme, and cell bundles of beams.

Komar T.V.

STRUCTURAL ORGANIZATION OF SUBCUTANEOUS ADIPOSE TISSUE OF THE SHIN IN HUMAN FETUSES

Department of Pathological Anatomy
Bukovinian State Medical University

Introduction. Every year, the prevalence of metabolic disorders among the population of different ages is increasing. A few decades ago, obesity was a disease of adults, but today, society is facing the problem of the metabolic disorders frequency increasing in children. That is why the interest of researchers in the peculiarities of the formation of adipose tissue has increased. Recent studies have proved the existence of three types of fat cells in humans: white, beige and brown adipocytes.

The aim of the study. The aim of the study is to investigate the adipose tissue formation features of the shin in human fetuses of 5-6 months.

Material and methods. A microscopic examination of preparations of the upper, middle, and lower thirds of the lower leg of 12 human fetuses with a parietal-coccygeal length (PCL) of 136.0-230.0 mm was carried out. Staining of histological sections with hematoxylin and eosin was used. A histochemical study of the protein with bromophenol blue according to Mikel Calvo' method was used for a better contrast of the protein elements of the structures. The percentage of multilocular cells was calculated on digital copies of optical images in the environment of the computer program ImageJ 1.53t (2022) with subsequent statistical processing of quantitative data using the open software "PAST" (Paleontological statistics, version 4.9 2022).

Results. During the microscopic examination of the structures of the shin in human fetuses of 5-6 months, structure features and adipose tissue location were revealed. In 5-month-old human fetuses, the adipose tissue of the upper third of the shin is represented by single cells, which are mainly localized around blood vessels and nerves. It is interesting that in fetuses of this age, the majority of adipocytes was found at the level of the lower third of shin, which formed flat plaque-like clusters of single and multilocular cells, and in most cases they were localized near blood vessels. Such adipocytes clusters are clearly separated from neighboring structures by the loose connective tissue. The percentage of multilocular adipocytes is 85.3±0.92% (confidence interval 70.8-94.4% at p=0.05). In 6-month-old fetuses, the subcutaneous tissue of the shin has the appearance of elongated flat plaque-like clusters located in one row. The adipose tissue is well vascularized and clearly separated from neighboring structures. Multilocular adipocytes prevail quantitatively, 93±0.12% (confidence interval 88.7-96.0%, p=0.05).

Conclusions. Subcutaneous adipose tissue in human fetuses of 5-6 months is heterogeneous and is represented by single and multilocular cells. During the fetal stage, the number and proportion of fat cells types changes. In 5-month-old human fetuses, adipocytes are located singly, with a predominance in the lower third of the shin; in 6-month-old fetuses, they already form elongated clusters.

Lavriv L.P.

ANATOMY OF THE PAROTID GLAND

Department of Anatomy, Clinical Anatomy and Operative Surgery
Bukovinian State Medical University

Introduction. Formation of the organs is a very complicated process which is not definitively studied nowadays. It is very important to study the structure of the organs and systems in association with the basic processes of morphogenesis on the basis of the findings of embryogenesis. The study of the development and forming of the topography of the parotid gland during the prenatal period human ontogenesis is of great importance for integral understanding of the structural – functional organization of the salivary apparatus and the oral cavity on the whole.

The analysis of scientific literature dealing with the parotid gland anatomy is indicative of a fragmentariness and discrepancy of the data, pertaining to the syntopy and chronology of the topographic-anatomical changes during the fetal period of human ontogenesis.

The aim of the study. The objective of the study was to investigate variant anatomy and topographic-anatomical peculiarities of the human parotid gland and surrounding structures in fetuses.

Material and methods. The parotid gland was examined on 25 human fetuses, 130,0-375,0 mm of the parietal-coccygeal length (PCL). The following methods were applied in the course of the study: thing section of the parotid gland and parotid-masticatory area under the control of a binocular magnifying glass; macro- and microscopy; morphometry; computed 3-D design.

Results. The parotid gland is found to be located in fetuses with 130,0-375,0 mm of PCL in a deep depression posteriorly the branch of the lower jaw, in the posterior mandibular fossa. A greater part of the gland is located between the mandible and sternocleidomastoid muscle penetrating deeply between these structures. The skin of this particular region is thin, movable. The subcutaneous pot is thin and fused with the skin. The structure of the parotid gland of 4-10month human fetuses is anatomically changeable which is manifested by different shape (oval, leaf-shaped, horseshoe-like, triangle, irregular tetragonal), location and syntopy. Computed 3-D design of the gland presents its volumetric description which is the most practical one – in the shape of trilateral pyramid turned to the malar arch by its base, and to the mandibular angle – by its apex. A number of structures pass through the tissue of the parotid gland including facial nerve, posterior mandibular vein, external carotid artery, auricular-temporal nerve. The parotid duct is formed due to the fusion of two extra-organ lobular branches which in their turn are formed by means of fusion of several upper and lower lobular ducts emerging from the gland tissue passing through its capsule. The direction of the parotid gland is arch-like, with upward convexity. Passing along the external surface of the mastication muscle the parotid duct touches the upper extremity of the adipose body of the cheek and penetrates through the buccal muscle into the oral vestibule where it opens in the shape of a papilla of the parotid duct. The length of the parotid duct in the fetuses of the third trimester is 8,0-26,0 mm, diameter of the lumen is within 0,8-2,5 mm. The parotid duct is projected on the skin of the face from both sides along the line from antilobium to the mouth angle. The wall of the parotid duct consists of the connective tissue rich in elastic fibers and epithelium lying the lumen of the duct. The epithelium consists of two layers – deep cubic and superficial cylindrical.

Conclusions. So, morphogenesis and topographic formation of the human parotid gland in fetuses are influenced by a total effect of spatial-temporal factors associated with the dynamics and close syntopic correlation of organs, vascular-nervous formations and fascial-cellular structures of the parotid area. At the end of the 10^{th} month of the prenatal development the parotid gland under the microscope demonstrates its practically definite shape, although histological processes of differentiation in it are not completed yet. A study of the specific characteristics and consistent patterns of the morphogenesis and dynamics of the spatiotemporal changes of the salivary glands will make it possible to reveal new findings, pertaining to the emergence of variants of their structure, the preconditions of the onset of the congenital malformations and acquired diseases.

Lazaruk O.V.

FEATURES OF MORPHOLOGICAL DIAGNOSTICS OF CYTOLOGICAL MATERIAL IN AUTOIMMUNE THYROIDITIS

Department of Pathological Anatomy
Bukovynian State Medical University

Introduction. The study of chronic, lymphocytic thyroiditis began in 1912. The number of patients with this pathology increases every year. Diagnosis of the disease is not difficult, but establishing the malignancy of nodules associated with thyroiditis is quite ambiguous. Chronic autoimmune thyroiditis (AIT) has stages. Hyperthyroidism prevails in the initial stage. This is a state of increased production of T3 and T4 hormones of the thyroid gland (TG), which later turns