

ment were operated with the application of laser radiation. An erbium laser with a wavelength 2940 nm was used. In the preoperative period all the patients have undergone clinical, radiological and laboratory study of blood. The patients were consulted by a hematologist. The number of homocysteine in the mixed saliva and the number of fibroblast growth factors β were determined.

Results. None of the patients had postoperative bleeding, post-surgical pain. Complete epithelization took 11–12 days. The results of immunoenzyme analysis confirmed a small lesion and good tissue regeneration after the erbium laser application.

Conclusions. Important advantages of laser application in surgical treatment of patients with hemostatic disorders were reliable hemostasis and low injury rate.

VARIATIONS OF LOBES AND FISSURES IN HUMAN FETAL LUNGS: A CADAVERIC STUDY

Lazarova D.¹, Nakeva N.¹, Dodevski A.¹, Kostovski M.²

¹ Institute of Anatomy; ² Institute of Histology, Medical Faculty Skopje, Republic of Macedonia

Key words: lungs, oblique fissure, horizontal fissure, fetuses

Background. The human lungs are divided by fissures into lobes, which facilitate movements of lobes in relation to one another. Anatomical variations of lungs including number, fissures and lobes are at utmost important.

Aim. The study was done to note the morphological variation of the fissures and lobes in fetal lungs.

Material and Methods. 62 human fetuses from 12 weeks to 40 weeks of gestational age were collected from the department of Obstetrics and Gynaecology, University Clinic Hospital, after getting formal permission from the concern authority/persons and the Institutional Ethics Committee. After fixation in 10% formalin, fetuses were dissected and both lungs were removed for examinations.

Results and Discussion. On the right side, 8 specimens showed incomplete oblique fissure, 39 specimens showed incomplete horizontal fissure, 1 specimen showed absence of horizontal fissure and 9 specimens showed superior accessory fissure. On the left side, 5 specimens showed incomplete oblique fissure and the left minor fissure was seen in 8 specimens.

Conclusions. Knowledge of lobes and fissures in a particular population might help the clinician during diagnosis and partial resection of lungs. This may reduce morbidity and mortality associated with lung disease.

FEATURES OF THE PERSON HEART TOPOGRAPHY IN 16–22 WEEKS OF PRENATAL ONTOGENESIS

Liashchenko D. N.

Orenburg State Medical University, Orenburg, Russia,
Human Anatomy Department
lyaschenkod@mail.ru

Key words: fetal heart, topography, fetal surgery

Background. Now the person heart is one of subjects to fetal operations.

Aim. Therefore information about heart topography and its features in the prenatal period are necessary for doctors of various profile. Obtaining new data on heart topography at person fetus of 16–22 weeks of development became a research objective.

Material and Methods. Material of this research is 30 fetus torsos of both sexes without pathology of chest and abdomen organs.

Results and Discussion. Results of a research have shown that in 16–22 weeks of prenatal ontogenesis the superior, inferior and right borders of heart are extended with the stability of left border. The left border of heart throughout all studied age period doesn't change the localization and has the projection on the left anterior axillary line. The right border of the heart is displaced to the right by 22nd week: at 60% of samples have the projection on parasternal line, at 40% — on right middle clavicle line. Heart is displaced closer to the anterior chest wall by 22nd week. Situs of fetal heart has individual distinctions which are shown in relationship of heart with the thymus, the esophagus and the left lung. Distances from heart to surrounding organs are increased ranging from 5% (to the left main bronchi) up to 69% (the right vagus nerve).

Conclusions. Thus the heart topography in 16–22 weeks of ontogenesis has the features which have to be considered at fetal operations.

CHANGES IN TOPOGRAPHY OF THE RETROPERITONEAL ORGANS IN TWO BODY POSITIONS: ON THE BACK AND ON THE SIDE

Liashchenko S. N., Demin D. B., Urazov D. F.

Orenburg State Medical University, Orenburg, Russia
serglyashenko@mail.ru

Key words: kidney, displacement, retroperitoneal organs, topography

Aim. The aim is to study the changes in topography of the retroperitoneal organs at body position on the back and in the lateral position.

Material and Methods. Data of multispiral CT-scan of 36 patients with body position on the back and lateral side were studied. 19 patients were with the left side, 17 with the right side body position. There were 19 women (52.8%) and 17 men (47.2%). The middle age was 57.3±12.2 year. The system of coordinates has been offered. The vertical