

**Results and Discussion.** As a result of the study, it was found that the elastic-strength properties of the ligaments of the spine and the joints of the extremities depend on the features of their internal structure: the form and the mutual arrangement of the fibrous elements.

**Conclusions.** The answers of functional biomechanical tests also depend on the external shape of the bone. The relationship between the bone biomechanical properties from human somatotype has been established.

#### JUSTIFICATION OF THE OPERATIVE INCREASE OF MAMMARY GLANDS

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It is hardly possible to find a woman who would never have thought about correcting the shape of her breasts. Someone would like to just pull it up, someone — to do less, but most of the ladies, dissatisfied with their forms, would like to still increase it. Moreover, breast augmentation, or augmentation of the mammary glands, is one of the most popular plastic surgery in the world. The operation to increase the mammary glands is shown mainly to women who have a small breast size, which often leads to discomfort, dissatisfaction with themselves, psychological problems. Also, many women after pregnancy, breastfeeding or strong weight loss note that the breast has significantly changed shape, has become smaller or sagged. This problem also leads to psychological problems, a woman begins to feel shy of her body, intimate problems may begin, and cases of severe depression develop. In this case, the woman also comes to the rescue of mammoplasty. Based on the knowledge of topographic anatomy, the blood supply of the mammary gland is carried out through the branches of the internal thoracic artery, lateral thoracic artery and 3–7 posterior intercostal arteries from the thoracic aorta. And the perforating branches of the intercostal arteries take an insignificant part. The venous network consists of a surface and a deep system. Deep veins accompany the arteries and flow into the axillary, internal thoracic, lateral thoracic and intercostal veins, partly into the external jugular vein. From the superficial veins of the mammary gland, blood flows into the dermal veins of the neck, shoulder, side wall of the chest and veins of the epigastric region. Surface and deep veins form plexuses in the thickness of the gland, skin, subcutaneous tissue and widely anastomosed with each other, with the veins of neighboring regions and the opposite breast. Therefore, the enlargement of the mammary glands with the help of implants can be performed through the incisions in three places:

in the crease under the breast; on the margin of the areola; in the armpit area. Modern breast implants are a hard shell made of medical silicone with a smooth or textured surface. This shell is filled with gel or saline solution. The shape of the breast implants can be round or drop-shaped — the first create a pleasant roundness in the upper chest, while the second repeat the natural forms. Breast augmentation can be combined with their lifting-the need and possibility of combining these two operations is discussed during a consultation with the doctor.

#### ANATOMICAL SUBSTANTIATION OF ABDOMINOPLASTY

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**Key words:** *abdominoplasty, correction, anatomy*

Abdominoplasty is an operation to correct abdominal contours. Most often the stomach is stretched by pregnancy or by fast weight gain. And if diet and exercise in most cases help get rid of excess fat, stretched muscles and skin to return to the original state with their help is not always possible. And for many women, this is causing serious depression. They can no longer freely buy the desired clothes, undress on the beach and in the pool, etc. Improve their quality of life called abdominoplasty — its effectiveness when used for this purpose is confirmed by research. Thanks to abdominoplasty, the abdomen decreases in volume and becomes flat, the waist is formed. The operation on the plastic of the abdomen begins with a transverse incision above the pubis. The incision is made along the bikini line, so that later the scar could be hidden under the underwear. After this, the skin flap is peeled to the costal arch, highlighting the navel. Having thus opened the rectus abdominis muscles, the surgeon sews them in a new position, forming a waist. Excess skin with subcutaneous fat is removed. The navel is formed anew to move it to a new place on the skin flap that has been peeled off. Sometimes plastic surgery is performed only in the lower abdomen without transfer of the navel — this operation is called «mini-abdominoplasty». Also abdominoplasty can be combined with liposuction.

#### ABOUT EDUCATIONAL PROCESS PROVIDING AT THE DEPARTMENT OF TOPOGRAPHIC ANATOMY AND OPERATIVE SURGERY OF KSMU

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**Key words:** *education, corpses, anatomy, preparation*

The department of topographical anatomy and operative surgery has arisen for joint teaching of applied anatomy and operative surgery on corpses. Since the beginning of the 20th century the program

included mandatory animal surgeries to acquire the skills of working with living tissues. At the department of anatomy student should get the skill of preparation on a corpse material, which is impossible to fully obtain when using replicas and simulators. Unfortunately, the department is experiencing an acute deficiency in the receipt of cadaveric material. Last years there were no new corpses. So now for educational purposes we have only 2 corpses: one «exam», inaccessible to students and, therefore, sufficiently preserved, and the second, at which deals up to 500 students per year. This corpse quickly loses important anatomical formations, so it constantly conducts independent work of students. Some things are better with the preparation of the limbs. To carry out intestinal seams we have to buy intestines of animals in the market. In connection with the lack of cadaveric material to practice practical skills on surgical surgery at the department was created a scientific and practical students association. There students can practice at animal material how to develop skills of ownership Surgical instruments, the technique of imposing intestinal seams, vascular seams, joints of nerves and tendons, heart and parenchymatous organs. Thus, from 3 main types of educational activity at the department, such as topographical anatomy teaching on the corpse material, surgical operations on corpses and and surgical operations on animals — we only perform the first. In the absence of corpse material for a number of years are not only students, but also young teachers have no skills of preparation. From our point of view, to improve the quality of students' training, it is necessary to solve the issue of supply of corpse material and operations on animals at the departments of anatomical profile.

#### EFFECT OF ALPHA LIPOIC ACID ON RECOVERY OF FUNCTION AFTER DELAY REPAIR OF THE SCIATIC NERVE

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**Key words:** *lipoic acid, peripheral nerve, delay repair*

**Background.** Contrary to experimental studies routin clinical studies peripheral nerve cut does not performed immediately after injury. Therefore there is a delay for reconstruction of the peripheral nerves.

**Aim.** In the present study we aimed to study effect of lipoic acid treatment in delay repair model of peripheral nerve to understand how axonal pathfinding and functional recovery will be affected.

**Material and Methods.** For this purpose, a total number of 70 Wistar rats were used for this purpose and divided into seven groups Grup 1 (Control), Group 2 (Sham), Group 3 (Primary repair),

Group 4 (Delay repair), Group 5 (Primary repair+LA), Group 6 (Delay repair+LA) ve Group 7 (Delay repair+delay LA treatment). Animals which treated with alpa lipoic acid were given 50 mg/kg/day dose of alpha lipoic acid.

**Results and Discussion.** Sciatic nerve regeneration was evaluated by walking track analysis, pinch test, light and electron microscopy and antioxidant effect of Alpha lipoic acid (+) was evaluated by biochemical analysis. We found that there was a beneficial effect of lipoic acit treatment on sciatic nerve after delay repair. However, this beneficial effect has been affected from structure of the sciatic nerve which detoiriated due to delay repair.

**Conclusions.** We think that our study will add valuable knowledge to the literature on the understanding of the nerve regeneration.

#### PECULIARITIES OF THE PANCREATIC ARTERIES ANASTOMOSES FORMATION

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**Key words:** *pancreas, blood supply, pancreatic arteries, anastomoses*

**Aim.** The study was designed to establish anatomical features of the pancreatic arteries anastomoses formation.

**Material and Methods.** We examined 105 macro-preparations of the pancreatic arteries using angiography.

**Results and Discussion.** 88% of cases showed anterior vertical pancreaticoduodenal anastomosis between the anterior superior pancreaticoduodenal artery and pancreaticoduodenal or its anterior branch. In 58.5% of cases we observed posterior anastomotic arc or posterior vertical pancreaticoduodenal intersystemic anastomosis which was formed by connections of posterior superior pancreaticoduodenal artery and posterior branches of the inferior pancreaticoduodenal artery or additional inferior pancreatoduodenal artery. As a variant of blood supply to the head of pancreas, a horizontal intra-system anastomosis was found between the anterior and posterior branches of the lower pancreatoduodenal artery. In 44% of cases the pancreatic branch supplying the head and neck of the pancreas formed anastomosis with the right branch of the dorsal pancreatic artery (branch of splenic artery). In 26.7% of cases anastomosis was between the lower pancreatoduodenal arteries and the right branch of the dorsal pancreatic artery. In half of these cases, the right branch of the dorsal pancreatic artery was divided into two branches: the upper and the lower.