of this area, which requires work only in manual mode, and this does not exclude the error in the study.

COMPARATIVE MORPHOLOGICAL CHARACTERISTICS OF THE LEVATOR ANI MUSCLE IN MAN AND RAT

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Key words: *m. levator ani, m. pubococcygeus, m. iliococcygeus, m. pubocaudalis, m. iliocaudalis*

Background. Currently, for the study of pelvic floor disorders, such as urinary incontinence, faeces, pelvic prolapse, are used as a model of white laboratory rats.

Aim. From the point of view of the justification of the modeling of the symptoms of pelvic floor disorders, we set the goal of the study: to make a comparative analysis of the structure of the muscle that raises the anus in a man and a rat.

Material and Methods. In our work we used methods of dissection of cadaveric material, light microscopy, morphometry of muscle fibers, histochemistry.

Results and Discussion. As a result, the main forms of the muscle structure that lifts the anus in rats of both sexes are described: a horseshoe shaped in males, «0» shaped in females. The basic forms of muscle fibers of the muscle that lifts the anus are also determined: in humans, they have a rectangular and rounded section; in rats, tricephalus or polygonal shape. Histochemical examination showed the presence in rats in m. levator ani of predominantly glycolytic fibers in contrast to people where the muscle lifting the anus is represented predominantly by oxidative fibers. Conclusions Histochemical methods revealed fast and slow muscle fibers in m. levator ani rats. Glycolic fibers (type II) are represented in the predominant quantity in rats of both sexes in comparison with oxidative (type I). People m. levator ani predominantly consists of slow oxidizing fibers (Bouorcier, Shafik 1999). This feature may be related to the verticalization of the position, the reduction of the caudal vertebrae and the peculiarity of the location of the pelvic organs with respect to the center of gravity of the earth.

Conclusions. Histological analysis of the metabolic profile of muscle fibers m. levator ani of humans and rats, features of the ultrastructural and macroscopic structure on the one hand makes it possible to use the white rat as an object for experimental study of the symptoms of incontinence of urine and feces, prolapse of internal organs; but on the other hand, it is necessary to take into account the functional peculiarity of the prevailing number of muscle fibers, the ability to train muscles to achieve the effect of conservative treatment of incontinence symptoms.

CLINICAL STUDY OF A NEW METHOD OF REDUCING INTRA-ABDOMINAL PRESSURE IN INCISIONAL HERNIA REPAIR BY SUBLAY MESH

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Key words: *method of reducing intra-abdominal pressure, incisional hernia*

Material and Methods. The clinical study included 20 patients suffered from incisional hernias divided up into two groups (main and control) of 10.

Results and Discussion. In the main group (n=10) hernia repair sublay mesh was used together with the original relaxing incision of anterior rectus sheath (RU 2638685) and in the control group (n=10) the classical sublay mesh was used. The level of the intra-abdominal pressure in the end of the surgery was of 11.7±0.6 mm hg.st. and 14.2±0.5 mm hg.st. However, the day after operation the level of intra-abdominal pressure was of 9.8±0.5 mm hg.st. and 12.3±0.4 mm hg.st in the main and in the control group respectively (p=0.05). Postoperative complications in the main group were not observed. In the control group postoperative complications were detected in 20% of patients during the early postoperative course (seroma of the postoperative wound and paresis of the bowel) and 40% patients had postoperative complications during the late postoperative course (chronic pain) (p=0.05).

Conclusions. So the results show that the original relaxing incision is simple, time-saving and safe operation. It provides substantial reduction ofintra-abdominal pressure and postoperative complications.

SURGICAL ANATOMY OF INTERCOSTAL NERVES IN THE AREA OF THE LATERAL EDGE RECTUS SHEATH

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Key words: *abdominal wall, intercostal nerves, chronic pain*

Aim. To study features ofthesurgical anatomy of intercostal nerves in the area of the lateral edge rectus sheath.

Material and Methods. We investigated 88 floating corpses of both sexes, without pathology of abdominal wall. There were 45% corpses

of males (middle age — 53.8±11.9 years) and 55% — a females (51.9±13.2 years).We determined the number of intercostal nerves in the area of the lateral edge rectus sheath. We explored options of the penetration intercostal nerves in rectus abdominis.

Results and Discussion. The number of intercostal nerves in the area of the lateral edge rectus sheath ranged from 5 to 7, but most of the nerves were 6 (70%).In the presence of 6 intercostal nerves statistically significant difference between persons of male and female were not found. 5 intercostal nerves were observed in males (67%), and 7 of nerves — in females (64%).We have found the posterior (63%) and lateral (37%) variants penetration intercostal nerves in the rectus abdominis. The posterior variant was significantly more common in females (74%), and a lateral variant — in males (65%).

Conclusions. We have received new data on the surgical anatomy intercostal nerves in the area of the lateral edge rectus sheath, which must be considered when performing hernia repair.

EXTREME SUBSTANTIATION OF INCREASE OF EFFICIENCY OF PASSAGE OF DRUGS INTO THE CAVITY OF THE KNEE JOINT IN DISEASE

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Key words: *knee joint, drugs, puncture, cartilage*

Background. One of the methods of treatment and diagnosis of diseases of the knee is a method in which the introduction of a needle in the knee cavity is used.

Aim. The disadvantage of this method of puncture of the joint is that the fluid in this direction of compression of the patella can be distributed along the side rotations of the joint and throughout the upper volvulus, which does not create enough intra-articular fluid in the region of the needle needle syringe.

Material and Methods. There is an increased trauma of the needle of cartilage and bone structures of the joint during the puncture in a small amount of fluid in the area of the injection, since the intra-articular space free for injection is too small for the unhindered introduction of the needle and it touches the intra-articular bone and cartilage structures nearby to the point of the injection.

Results and Discussion. By far the most frequently used method of delivery of drugs into the cavity of the knee joint is the injection method of administering medicines through the anteroinferior medial and lateral inversions with anatomical a message from the slit between the bottom surfaces of the meniscus and the cartilage surface of the tibia.

Conclusions. At present, from the topographic and anatomical point of view are not described, not justified methods of administration of drugs. The question of passage of drugs to the back of the knee joint remains open.

PHYSICIAN'S VIEWS OF ORGAN AND BODY DONATION: INSIDE THE MEDICAL DISSECTORS' MIND

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Key words: *body donation, view, education, dissection*

Background. Factors that determine an individuals' choice to enrol in organ/body donation programs vary widely among professions, demographics and cultural background.

Aim. This study aims to explore the views of medical doctors (MDs) regarding organ/body donation in comparison to that of anatomists.

Material and Methods. A total of 91 MDs and 26 anatomists from the UK and Ireland; and 54 anatomists from the United States of America (USA) completed a 15-items electronic survey designed to explore their views on dissection and organ/body donation.

Results and Discussion. Only 6.6% of MDs were willing to donate their whole body for research/education; 35.2% were willing to do so if organ donation was not an option, whilst 58.3% indicated they would only donate their organs. Among anatomists, 20.4% and 66.7% expressed their willingness to donate their organs and whole body respectively in the USA; while 38.5% and 42.3% were willing to donate their organs and whole body respectively in the UK. Anatomists' willingness to donate their bodies was significantly correlated to experience and influenced by their belief in an afterlife which was not the case amongst MDs. Less than half of the MDs respondents appreciated the relevance of cadaveric dissection to the future doctor-patient-relationship in contrast with the 79.6% and 80% of anatomists based in the USA and UK respectively (significance set at p-values<0.05).

Conclusions. MDs views on the impact of cadaveric dissection are dissimilar to that of anatomists. Attitudes influencing MDs to donate their organs/whole body is relatively unexplored in the literature warranting further investigation.