1) puncture and aspirate the contents of the large and busy gallbladder; 2) CAUTION carefully and highlight elements of the triangle Kahlo and well klipirovat; 3) rinse thoroughly, drain and aspirate obstructive and suprahepatic space. Thus, emergency laparoscopic cholecystectomy was performed in 511 patients with acute cholecystitis, 11 of them with the transition to the traditional method. Were no deaths.

List of our works, published on topic of laparoscopic cholecystectomy:

- 1. "Advantages, possible mistakes, dangers, and complications of laparoscopic cholecystectomy", Collection, materials of Russian symposium, Moscow, May 1996, p. 26–28 (co-authors B.I. Bapayev, K.E. Ergaliyev, A.B. Baizharkinova, and others).
- 2. "Laparoscopic cholecystectomies" Collection, 2nd Moscow international congress on endoscopic surgery, Moscow, IV, 1997, pp. 12–13 (coauthors B.I. Baspayev, A.B. Baizharkinova).
- 3. "Results of medical ezophagogastrodeudenoscopy". Russian symposium Clear space endoscopic surgery: Thesises of report Surgery, № 5, 1998, pp. 150–151 (co-author A.B. Baizharkinova).
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- 5. "Closest and distant result results of videolaparoscopic surgery" – Collection: 4th Moscow international congress on endoscopic surgery, Moscow, IV, 2000, pp. 34–35 (co-authors B.I. Baspayev, A.B. Baizharnikova, and others).
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THE DIVERSITY OF THE MEDICAL DEVICE ARENA AND THE RATIONAL CHOICE OF THE REQUIRED PRODUCT

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Information systems in Health care that are based on service-oriented architectures should not only capture, present and evaluate information about the person's health status, but also they should increase the efficiency of the hospital. For example, health care information systems should control rational choosing a medical device in the hospital.

Medical devices are used to enhance health care in general and to enhance the health of everyone. On the one hand, the use of medical devices brings health care to the next level and it has a lot of benefits to the patients. One the other hand, the process of choosing a medical device is intricate. In many cases the choice and use of medical devices is not based on the needs of a hospital. So information systems, models and methods should be developed

in order to optimize the process of choosing a medical device. Developing a decision support system is one of the ways to solve the current problem of lack of a medical device management system and to improve health care.

It is worth noting that the medical devices market is growing. For example, only in Germany there are more then 170 manufactures of medical devices. How do doctors choose which one to buy when there is such a diversity of medical devices? Medical devices are often chosen for their technical attributes. Marketing politic of the seller or physician preferences also influence the decision. But there are a lot of problems to choosing and buying a medical device.

One of the major obstacles to rational choosing of a medical device is innovation. The fact that this particular medical device is innovative can influence the decision. The specialist does not always consider whether this technology will be used in the hospital. The second important barrier to choosing a medical device is the lack of adequate information. The marketing and selling specialists try to show the best options of the device. So sometimes it can be difficult for decision-makers to compare the analogues medical devices reasonably. Moreover, the post-market surveillance systems which are the way to follow-up on the safety and effectiveness of a device do not function properly. The third problem that decision-makers face when they want to choose the medical device rationally is the high costs of it. Not only are the medical devices expensive, there are also hidden costs such as costs of accessory options, years of warranty, installation, procedures and recurrent costs for maintenance, spare parts, consumables etc. In addition, the doctor often chooses the medical device according to his preferences and previous experience. This choice may not be rational.

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REACTIVE CHANGES AND FEATURES REPARATIVE REGENERATION MYOMETRIUM LOWER UTERINE SEGMENT DUE TO ITS EXTENSION

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The regenerative ultrastructural changes in lower uterine segment myocytes have been investigated with phase contrast and electron microscopic examinations after experimental dilatation. The myometrial myocytes damage provocation takes place unevenly after lower uterine segment dilata-

tion. The fibrous connective tissue synthesis starts during the reparative regeneration, it leads to hystoarchitectonics disruption and local myometrium disfunction. The fibrillar structures synthesis in intercellular substance is carried out by phenotypic smooth muscle type transformation from contractile to "Synthesizing". Smooth muscle cells are not involved in cell proliferation. The myocytes intracellular regeneration takes place in lower uterine segment.

Introduction. A visceral muscle tissues study that form the hollow organs walls and various sphincters, is the most actually and poorly known [3]. There is no common understanding between pathologists and obstetricians about morphological and functional features of the lower uterine segment [4]. There is opinion that the lower uterine segment sphincter performs the obturator function of pregnancy cervix, also it has an indicator function in progress of abnormal occurrences in parturition [2, 5]. In addition, the lower uterine segment postpartum restoration forms a full barrier for ascending infection progress. The lower uterine segment traumatic injuries in obstetric practice which occurred after violent expansion of the cervical canal in induced abortions and diagnostic curettage, promote lower uterine segment functional insufficiency in pregnancy and have the adversely affect birth outcomes. It is necessary to develop the methods for correction the caudal uterus functional insufficiency after injury in the absence of morphological evidence, so we determined the purpose of our research [1, 6].

The purpose of present study was to research reparative regeneration in rat functionally important lower uterine segment myometrium after tension in experiment.

First we have to simulate the rat lower uterine segment stretching, also we have to characterize the myometrium myocytes lesions in lower uterine segment after experimental tensile, at last we have to find the leading mechanisms of myometrium reparative regeneration for achievement.

Materials and methods. Thirty nulliparous mature white rats were used. The remaining intact rats were used as controls. "Rules to the Use of Animals in Research" were used in present experiment. The lower uterine segment was extended with the rat under Aether anesthesia. All the rats of the experiment group were killed under anesthesia using Aether. The materials were examined on third, seventh, tenth, fifteenth, twenty first days, that's why the materials were fixed in glutaraldehyde, filled with Araldite-Epon mixture, then the materials were contrasted with uranyl acetate and lead citrate. Semithin and ultrathin sections were prepared. We used phase contrast and transmission electron microscopy.

Results and discussion. The uterus lower segment stretching leads to uneven smooth muscle tissue damages in myometrium. Some myocytes in functional syncytium retained their structure,