МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
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Конференція внесена до Реєстру заходів безперервного професійного розвитку, які проводитимуться у 2023 році №5500074

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fixation strength was proportionally higher. On the other hand, the peak stress in the surrounding bone tissue was decreasing when the thickness of the cortical layer was increased.

Conclusions. The mechanical strength of fixation was related with the thickness of bone cortical layer and with the material of the screws. The nonlinear adverse correlation between the displacement and the thickness of the cortical layer was found. However, the mechanical parameters of polymeric materials were lower than of metal screws, but achieved results showed that their fixation strength is enough for internal fracture fixation in non-weight bearing areas. The polymeric screws can be used alone or in combination with metal devices, as they revealed good biocompatible properties and biodegradable properties in our previous studies.

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HISTOLOGICAL PRECONDITIONS FOR THE DEVELOPMENT OF COMPLICATIONS IN HERNIOPLASTY USING PROLENE ALLOGRAFTS

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Introduction. In recent years, the use of alternative methods of allograft fixation in anterior abdominal hernioplasty have become increasingly common, as the use of prolene ligatures leads to additional trauma of tissues and nerve fibers in the area of plastics, which can in its turn lead to postoperative complications. The use of stich-free methods of hernioplasty and of surgical sealants avoids the above complications, however, insufficiently effective fixation of the allograft can lead to its displacement in the postoperative period and cause recurrence of hernia.

The aim of the study: to study the terms of allograft fixation to tissues of bed with fibrin and collagen fibers for further elaboration of more effective methods of surgical treatment of anterior abdominal wall hernias.

Material and methods. The study is experimental. As the examination material were used 26 white rats, which were implanted in the muscles of the anterior abdominal wall with the prolene allografts measuring 0.5 × 0.5 cm. Collection of the material for histological examination was performed by biopsy of muscles with implanted allograft after 1, 3 , 5, 7 and 10 days from the moment of modeling the experiment. 3-5 μm thick sections were stained according to standard methods. The study was performed at a magnification of ×100 using a descriptive method of detecting changes.

Results of the study show that during the first four days after modelling the experiment, the fixation of the allograft occurs mainly due to fibrin fibers. When taking biopsy during this period, the allograft was easily moved. After the 5^{th} days of the modelling the experiment in tissue biopsies there was a predominance of collagen fibers. During taking the biopsy, the allograft was fixed to the tissues of the bed and did not move.

Conclusions. During the first four days of the postoperative period, the allograft's fixation is not effective enough, which can cause its displacement or twisting and lead to recurrence of hernia. Therefore, it is advisable to use surgical sealants to fix it and prevent the development of complications of the postoperative period.

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MANAGEMENT OF CHRONIC WOUNDS IN MODERN CONDITIONS

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Introduction. Chronic wounds occupy a leading position among diseases and hospitalization of patients in the department of purulent surgery. Such patients are characterized by long-term disability, expensive treatment, slow rehabilitation after treatment, or permanent disability. According to the World Health Organization, the main causes of wounds that do not heal for a particularly long time are insufficient blood flow in the wound, imbalance of inflammatory and reparative processes in the wound, microbial contamination and antibiotic resistance due to microbial biofilms, slowing down the formation of the demarcation wall, excess production of