

**МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ**



МАТЕРІАЛИ

**106-ї підсумкової науково-практичної конференції
з міжнародною участю
професорсько-викладацького колективу
БУКОВИНСЬКОГО ДЕРЖАВНОГО МЕДИЧНОГО УНІВЕРСИТЕТУ
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Матеріали підсумкової 106-ї науково-практичної конференції з міжнародною участю професорсько-викладацького колективу Буковинського державного медичного університету (м. Чернівці, 03, 05, 10 лютого 2025 р.) – Чернівці: Медуніверситет, 2025. – 450 с. іл.

У збірнику представлені матеріали 106-ї науково-практичної конференції з міжнародною участю професорсько-викладацького колективу Буковинського державного медичного університету (м. Чернівці, 03, 05, 10 лютого 2025 р.) зі стилістикою та орфографією у авторській редакції. Публікації присвячені актуальним проблемам фундаментальної, теоретичної та клінічної медицини.

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Measurements were taken at the beginning of the course of treatment and after the course, which included laser vaporization as an additional method of surgical treatment of DFU or DFW. The duration of application of this model of wound management in DFS was 14 days. According to the results of the study, in 80% of cases, the proposed model demonstrates rapid rates of healing of the wound defect, which was especially confirmed by the increase in TcPO₂ indicators relative to their starting values. The average value of oxygen tension around the defect before vaporization was 31.2 ± 2 mm.Hg, then after the course of treatment, which included laser vaporization in certain modes determined by the researchers, this average value increased and was 38.5 ± 4 mm.Hg, which indicates an improvement in the perfusion properties of tissues in the DFU\DFS area and as a result, indicates a high probability of spontaneous closure of the defect. But also it should be mentioned that the effectiveness of the method was directly correlated with the severity of ischemia in the lower limbs, which was confirmed instrumentally.

Conclusions. Laser vaporization, as a method of adjuvant surgical treatment of necrotized, poorly vascularized and ischemic tissues is a portable, highly effective and cost-effective method that needs to be included in the treatment protocols for the management of wounds or ulcers of the ischemic form of DFS.

Kateryniuk T. M.

CRYOPRESERVATION OF GERMINATIVE CELLS IN THE TREATMENT OF ONCOLOGIC PATHOLOGY IN PATIENTS OF REPRODUCTIVE AGE

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Introduction. In the structure of oncological pathology, there is a tendency for the number of younger patients to increase. When this diagnosis is established, the treatment of the patient requires the use of radiation, chemo-, immuno-, and hormone therapy.

The aim the study. These methods lead to damage to the germinal epithelium, often irreversible. A significant number are patients of reproductive age who do not have children. With a favorable prognosis for life in this group of patients, restoration of reproductive function is relevant.

Materials and methods. According to the international classification of the WHO, infertility in cancer patients receiving specific therapy is not distinguished and is considered as iatrogenic or acquired testicular damage. Patients of reproductive age with a verified oncological disease who want to have children are recommended to undergo cryopreservation of sperm. In the course of the disease with tumor processes, there is a cessation of pulsed secretion of LH, a decrease in the concentration of total and free testosterone, and the prevalence of catabolic processes. It is generally recognized that low-dose radiation therapy has less effect on spermatogenesis than chemotherapy. If the germ cell epithelium stem cells are intact, spermatozoa appear in the ejaculate in 60–70 days.

Results. It has been established that fractionation of the radiation dose increases damage to the germ cell epithelium stem cells. During radiation therapy, shielding the testicles reduces their damage, but the scattered radiation dose (about 2% of the total) quite often exceeds the threshold of spermatogenesis suppression. Chemotherapy damages spermatogonia DNA. For example, andriamycin, vincristine, and methotrexate cause irreversible azoospermia in 16% of adolescent patients. When cisplatin is prescribed, azoospermia occurs in 37% of adolescent patients. A course of treatment with cyclophosphamide or procarbazine leads to infertility in 68%.

Conclusions. The risk of irreversible azoospermia increases with a combination of radiation and chemotherapy. In recent years, sperm cryopreservation has become an increasingly common procedure. In specialized reproductive centers, sperm for cryopreservation, in addition to the usual ways, can be obtained, if necessary, using microsurgical technologies (TESA, PESA, MESA). A conversation with a patient about sperm cryopreservation occurs against the background of a severe psychological state. Therefore, it is recommended that the patients with uncertain survival prospects (IV clinical group) are not included in this program. At the same time, it is recognized that sperm cryopreservation can provide some psychological support to the patient. In many countries, this

procedure is included in the standards for treating cancer patients of reproductive age. Cryopreservation of spermatozoa of patients in this group is carried out. Patients of the III clinical group have healthy children born after cryoprotocols of the ICSI programs. In patients of fertile age with a favorable prognosis, sperm cryopreservation and assisted reproductive technologies help to realize plans for married life, improve medical and social adaptation and quality of life. It is necessary to optimize protocols for providing medical care to patients with oncological pathology, taking into account the prognostic survival of patients and possible family planning.

Knut R.P.

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 has 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 turn lead to postoperative complications. The use of stitch-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. 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 study material were used 26 white rats, which were implanted in the muscles of the anterior abdominal wall 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 of the experiment. 3-5 μ m thick sections were stained according to standard methods. The study was performed at a magnification of $\times 100$ using a descriptive method of detecting changes.

Results. The study show that during the first four days after the modelling of the experiment, the fixation of the allograft occurs mainly due to fibrin fibers. When taking a biopsy during this period, the allograft was easily moved. After the 5th days of the modelling of 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 the hernia, so it is advisable to use surgical sealants to fix it and prevent the development of complications of the postoperative period.

Preskure V.V.

THE USE OF PRP THERAPY IN THE TREATMENT OF TROPHIC ULCERS IN PATIENTS WITH POST-THROMBOPHLEBITIC DISEASE

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Introduction. Postthrombophlebitic disease (PTFD) is a complex chronic condition that develops in patients after deep vein thrombosis. One of the complications of PTFD is trophic ulcers, which are difficult to treat and have a high risk of recurrence. One of the modern approaches in treatment is the use of PRP therapy (Platelet-Rich Plasma – plasma enriched with platelets), which promotes wound healing due to growth factors contained in platelets.

The aim of the study. To assess the effectiveness of PRP therapy in the treatment of trophic ulcers in patients with post-thrombophlebitic disease.