



disorders) and potential reserve of bactericidal activity of phagocytes (negative variation -11.83%, 1st degree of immune disorders). Other changes were unlikely, though significant.

Despite the fact that surgery, even without trauma, significantly affects non-specific resistance and the immune response, in patients with TI detected disorders were significantly more prominent than in patients of the comparison control group.

In all patients with TI there are violations of non-specific resistance of the organism, mainly due to the increase in the relative number of 0-lymphocytes and decreased phagocytic activity, the rate of stimulated NST test, and suppression of the potential reserve of bactericidal activity of phagocytic cells.

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EXPERIENCE OF BLOCKING METAL-POLYMERIC INTRAMEDULLARY OSTEOSYNTHESIS TREATMENT OF FRACTURES OF LONG BONES

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The Department of Traumatology, Orthopaedics and Neurosurgery of Bukovinian State Medical University, Professor Rublenyk I.M., his students and co-workers, since 1978, have been conducting an intense and inventive scientific work on the development of technologies blocking intramedullary metal-polymeric osteosynthesis (BIMPO). Technology BIMPO designed for surgical treatment of femur, tibia and humerus bones, constitute a fundamental biomechanical, clinical and radiological study.

Publication of experience in the application of blocking intramedullary metal-polymeric osteosynthesis in the treatment of fractures of long bones. In hospitals of Chernivtsi, Khmelnytsky, Dnipropetrovsk regions during the period from 1980 to 2019 about 1200 surgeries were performed with different options of BIMPO controlled electronic-optical converter (EOC). The age of patients ranged from 12 to 90. 782 patients were operated on because of fresh fractures, 418 - because of their effects (slow and improperly consolidating fractures and pseudarthrosis, bone defects). 80% of patients experienced a splinter fractures. Disorders of reparative osteogenesis were observed in 10.7% of patients. Dynamic option BIMPO was used in 91% of patients, static - in 7.6%, and detensive - 2.4%. Open BIMPO was used in surgical treatment of 48.4% of patients, half open - in 29.2%, closed - in 22.4%.

Outcome of treatment of patients indicated that good results were observed in 82.14% of patients, satisfactory - in 12.5% of patients, and unsatisfactory consequences that require further treatment were recorded in 5.36% of patients. The frequency of satisfactory and unsatisfactory results was found mainly due to the nature of injury. Analysis and synthesis of the results of BIMPO showed that metal-polymeric locking latches have several advantages: the ability to use BIMPO in reconstructive surgery of the musculoskeletal system; there is no need to use expensive navigational structures and X-ray television equipment.

Interlocking intramedullary metal-polymeric osteosynthesis has all the characteristics to take its rightful place in the arsenal of methods of operative treatment of fractures and their consequences.

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TREATMENT RESULTS OF PATIENTS WITH AZOOSPERMIA

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World widely, an estimated 15% of couples have troubles with getting pregnant naturally. According to WHO data total proportion of the infertility factor reaches 46%. Success has been achieved in the treatment of female infertility but therapy of male infertility remains not so effective. There is a steady trend of increasing of infertile men number in recent years.

The purpose of the study is to analyze the spermograms of the men who have applied for examination to Fertility center. 3000 men have their sperm examined according to WHO 2000



recommendations using the inverted microscope Olympus CKX 41 in chamber Makler; the obtained results were analyzed. The average age of men who applied for examination was $31,74 \pm 8,26$. These data confirm and demonstrate the general tendency for men in family planning – the age for realizations their fertile potential is increasing; clinic of PADAM syndrome can appear at this age, in case of weak sexual constitution, which predetermines prognosis and correction tactics of subfertile state.

Research results of analyses showed a general tendency to a significant decrease of motile sperm of category B (slow rectilinear movement) and increase of category D (immobile). From 2016 to 2019, among 3000 examined men, 293 cases (9,76%) of azoospermia were detected. During the comparative analyses of the research results, there was identified the tendency of increasing of cases of azoospermia among men undergoing examination. These results confirm the worldwide trend towards an increase in the number of subfertile and infertile men. Secretary form of infertility caused the majority of cases of azoospermia (91,47%). All patients with obstructive form of infertility were offered surgical methods of sperm extraction. In case of this infertility form viable sperm was obtained from all patients. Patients with non-obstructive infertility form mainly have their sperm extracted directly from testicular tissue (TESA, TESE, MESA). In case of secretary form of infertility, sperm cells were obtained only in 32% and only in 12% their application in IVF-ICSI cycle gave a positive result.

Infertility is more common for men with the development delay and a weak sexual constitution. There are forms of infertility that cannot be diagnosed by standard methods of examination and accidentally occur in normozoospermia (violation of chromatine condensation, acrosomal reactions and capocytosis, increased chromosome fragmentation, etc.)

In the study group the asthenozoospermia is due to a tendency to significant decrease of motile sperm of category B (slow rectilinear movement). Sperm extraction by TESA or TESE is effective even in case of non-obstructive form of infertility.

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THROMBOHEMORRHAGIC COMPLICATIONS PROPHYLACTIC WITH LOW DOSES OF HEPARIN AFTER TRANSURETHRAL RESECTION OF THE PROSTATE

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Vascular disorders during transurethral resection of the prostate (TURP) and intraoperative bleeding result in activation of hemostasis and increased risk of thrombohemorrhagic complications development.

The purpose of our study is the prevention of that kind of complications after TURP. Material and methods -hemocoagulative system was evaluated in 65 male patients aged 42-86 years beforehand (Control Group, 35 pts) and next day after monopolar TURP (Group A and B). In Group A men receive standard postoperative care without any correction of hemocoagulative system. In group B non-fractionated heparin (10.000 IU a day) in combination with fresh-frozen plasma (5ml/kg a day) was prescribed in the day of operation for 3 days in order to prevent the hypercoagulation as a result of operative stress.

Results show the low potential of hemocoagulation in the patients of group A and prolongation of clotting time T by 1.6 times in comparison to control group (Combined index of coagulation $1,31 \pm 0,14$ vs $0,44 \pm 0,06$ units; Time of the blood clotting $500,54 \pm 29,41$ vs $792,88 \pm 14,36$ sec accordingly) that associated with the disorders of both thrombino, and fibrogenesis. Activity of thrombin formation significantly decreased – thromboelastographic constant K exceeded the control data by 1.4 times. Increase of thromboelastographic constant K by 1.7 and syneresis S constant characterized the whole coagulation phase and shows the simultaneous growth of fibrinogenesis period. Prescription of non-fractionated heparin (group B) resulted in increasing of thrombin formation, but duration of thromboelastographic constant r decreased 23.8% (not significant). Fibrin formation, according to changes of thromboelastographic constant K returned to normal but syneresis S constant, though being reduced 28,5%, still remained at 15,4% higher than in the control group.