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**EXPERIENCE OF BLOCKING METALLOPOLIMERY INTRAMEDULLARY  
OSTEOSYNTHESIS TREATMENT OF FRACTURES OF LONG BONES**

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The Department of Traumatology, Orthopaedics and Neurosurgery Bukovina State Medical University, Professor Rublenyk I.M. and his students, employees, since 1978, is an intense and inventive scientific work on the development of technologies blocking intramedullary metalopolimery osteosynthesis (BIMPO). Technology BIMPO designed for surgical treatment of femur, tibia and humerus bones, made fundamental biomechanic, clinical and radiological study.

Purpose: Publication of experience in the application blocking intramedullary metalopolimery osteosynthesis in the treatment of fractures of long bones. In hospitals Chernivtsi, Khmelnytsky, Dnipropetrovsk regions for the period from 1980 to 2019 conducted in 1200 operating interventions with different options BIMPO controlled electron-optical converter (EOC). Patients ranged in age from 12 to 90 782 patients operated because of fresh fractures, 418 - because of their effects (slow and improperly consolidating fractures and pseudarthrosis, bone defects). In 80% of patients experienced a splinter fractures. Disorders of reparative osteogenesis were observed in 10.7% of patients. Dynamic option BIMPO used in 91% of patients, static - in 7.6%, and detenziynyy - 2.4%. Open the BIMPO used in surgical treatment 48.4% of patients, half open - in 29.2%, closed - in 22.4%. In one case the operation was not carried dynamism.

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

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

**Vizniuk V.V.**

**ASPECTS OF NEPHROPROTECTION THERAPY OF PATIENTS SUFFERING FROM  
BENING PROSTATE HYPERPLASIA**

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Morbidity of benign prostate gland hyperplasia (BPH) occupies the third place after urolithiasis and heterospecific inflamantary diseases in the structure of diseases of urology profile. BPH is the most widespread disease among men of elderly and senile years, which determines quality of their life. However the characteristic complex of symptoms, clinical signs and macrostructural changes in the prostate gland develops rarely enough and depends on the stage of the disease (only 40-50 % men at the age of 50-64 have symptoms of the disease).

The functional state of the kidneys is important for the choice of tactics and method of treatment and significantly affects the treatment of the disease. In patients with BPH at the I-II stage of the disease, in most cases, the onset of chronic renal failure is diagnosed, but there are no pronounced clinical symptoms, since urination depends on the retraction ability of the bladder detrusor.

To provide highly effective nephroprotection therapy the basic links of physiopathological mechanisms should be considered, which are found in kidneys in case of obstructive uropathies. It results in underlying universality of pathogenetic mechanisms of kidney parenchyma damage without substantial dependence on aetiologic factors. In the last few years single scientific reports

have appeared concerning nephroprotection action of angiotensin transforming enzyme inhibitors, calcium channel blockers, L - arginine.

Nephroprotection action of these groups of preparations consists of elimination of disorders of lipid peroxidation, microvascular circulation of blood and improves antioxidant properties of the organism.

A great number of medicinal preparations of different action targeted at treatment of BPH is indicative of the fact that none of these medications is effective enough with monotherapy, that is why there is a necessity to introduce a complex therapy of kidney parafunctions.

**Vladychenko K.A.**

## **ANALYSIS OF SPERMIOLOGICAL RESEARCH INDICATORS AND MAR-TEST**

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Antisperm antibodies are detected in 3% to 25% of cases in men and women diagnosed with infertility. They can also be diagnosed in 1–10% of healthy fertile men. The presence of a high titer of antisperm antibodies is one of the factors of male infertility, which can be "hidden", is not cause symptoms and deterioration of the overall spermogram.

The aim of the study is to analyze the results of sperm testing in men with antisperm antibodies, which were detected by MAP test. A retrospective analysis of the results of the examination of 555 men was conducted on the basis of the Medical Center for Infertility Treatment in Chernivtsi. Spermograms were examined according to WHO recommendations in 2000, using an inverted microscope Olympus CKX41 in a Macler chamber. Determination of the percentage of sperm coated with antisperm antibodies was performed using the MAR-test (MAR-test, MAR-mixed antiglobulin reaction).

The average age of men included in the study was  $32.48 \pm 7.96$  years. In all patients, the results of laboratory tests for genital infections were negative, but a history of 198 men (35.7%) have positive tests for chlamydia (31 patients – 15.7%), mycoplasmosis (67 patients – 33.8%), trichomoniasis (34 patients – 17.2%), ureaplasmosis (66 patients – 33.3%). The previous infections of the genital system in this cohort of patients are regarded as a probable etiological factor of AST production. There is a tendency to the predominance of IgA over IgG. Allergic history was burdened in 23 patients (4.1%). 47 men (8.5%) had a history of surgical interventions on the organs of the reproductive system, namely: unilateral orchopexy – 4, Ivanisevich's operation on the left – 36, Marmar's operation on the left – 2, for hydrocele – 5. If we calculate the percentage of patients, which can be assumed to be related to the presence of antisperm antibodies with delayed surgery, infections of the genital system and a burdensome allergy history, we will get only 48.3% of cases. It has been found that most changes in sperm counts correlate with the percentage of sperm that are coated with IgG. These data indicate that increased IgG levels play an important role in the development of pathospermia. A negative medium-strength correlation was found between the percentage of Category A sperm and the percentage of IgG-coated sperm. Persistence of IgG in semen is accompanied by a probable decrease in the morphological quality of sperm. During the regression analysis, the trend line shows the prognosis - in the presence of 30% of sperm that are coated with IgG, with a probability of 95% of patients in the ejaculate will be 100% of pathological forms of sperm.

In 52% of patients it was not possible to establish the etiological factor for the presence of Ig in the ejaculate. It has been found that most changes in sperm counts correlate with the percentage of sperm that are coated with IgG. It has been determined that an increase in the level of IgA and IgG leads to a probable increase in the percentage of pathological forms and a decrease in sperm motility. In the presence of 30% of sperm that are coated with IgG, with a probability of 95% of patients in the ejaculate will be 100% of pathological forms of sperm.