

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



МАТЕРІАЛИ

**105-ї підсумкової науково-практичної конференції
з міжнародною участю
професорсько-викладацького персоналу
БУКОВИНСЬКОГО ДЕРЖАВНОГО МЕДИЧНОГО УНІВЕРСИТЕТУ
присвяченої 80-річчю БДМУ
05, 07, 12 лютого 2024 року**

Конференція внесена до Реєстру заходів безперервного професійного розвитку,
які проводитимуться у 2024 році № 3700679

Чернівці – 2024

УДК 001:378.12(477.85)

ББК 72:74.58

М 34

Матеріали підсумкової 105-ї науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) – Чернівці: Медуніверситет, 2024. – 477 с. іл.

ББК 72:74.58

У збірнику представлені матеріали 105-ї підсумкової науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) із стилістикою та орфографією у авторській редакції. Публікації присвячені актуальним проблемам фундаментальної, теоретичної та клінічної медицини.

Загальна редакція: професор Геруш І.В., професорка Грицюк М.І., професор Безрук В.В.

Наукові рецензенти:

професор Братенко М.К.

професор Булик Р.Є.

професор Гринчук Ф.В.

професор Давиденко І.С.

професор Дейнека С.Є.

професорка Денисенко О.І.

професор Заморський І.І.

професорка Колоскова О.К.

професор Коновчук В.М.

професор Пенішкевич Я.І.

професорка Хухліна О.С.

професор Слободян О.М.

професорка Ткачук С.С.

професорка Годоріко Л.Д.

професор Юзько О.М.

професорка Годованець О.І.

ISBN 978-617-519-077-7

© Буковинський державний медичний
університет, 2024

Material and methods. 82 patients with rheumatoid arthritis, aged from 47 to 66 years, who sought consultation regarding manifestations of TMJ dysfunction, were examined. The control group consisted of 44 practically healthy people of the appropriate age.

A clinical examination of the oral cavity of the patients was carried out. TMJ status was assessed using a short Hamburg test, palpation and X-ray examination. All patients underwent occlusiography and odontoperiogram.

Results. It was found that in 25 patients (30.5 %) TMJ arthropathy wasn't detected, but occlusion disorders, the presence of dentition defects was determined, which required rational prosthetics with deprogramming of myostatic reflexes and restoration of occlusal relationships. Only 3.66 % of patients had signs of TMJ dysfunction without violations of occlusal relationships. All other patients (65.84 %) had various combinations of pathologies of both TMJ and dento-maxillofacial complex. Chronic generalized periodontitis (CGP) of the I-II degree of severity was found in 36.6 % of patients with TMJ pathology against 11.35 % in the control group. At the same time, CGP was accompanied by occlusion pathology (traumatic occlusion) in 79.92 % of people. Multiple defects of the dentition were found in 56.61 % of patients with CGP. Secondary maxillofacial deformities were also observed in 10.98 % of patients, pathological eruption of third molars – in 9.76 %, and the presence of orthodontic pathology – in 4.88 % of patients.

Conclusions. Analysis of the state of the maxillofacial system in patients with temporomandibular joint pathology with existing rheumatoid arthritis showed various combinations with chronic generalized periodontitis (36.6 %), traumatic occlusion (79.92 %), dentition defects (56.61 %), which can be the cause of the development of temporomandibular joint dysfunction and contribute to its aggravation.

Kasiyanchuk M.V.

SOLITON IN BONE TISSUE NEUROLOGICAL MANIFESTATIONS IN DENTAL CLINIC PECULIARITIES OF COMPUTER SUPPORT TO CLINICAL AND CLINICAL RESEARCH

*Department of Prosthetic Dentistry
Bukovinian State Medical University*

Importance. During dental implantation, the main task of a practitioner is to restore the lost anatomical structure of the jaw's cellular process. The scientist, in our opinion, faces a slightly different task: to find alternative methods of diagnosis and treatment that would prevent the manifestation of inflammatory and dystrophic processes in tissues as a result of surgical intervention. It is known from the literature that in many cases it is surgical trauma at the first and second stages of implantation that provokes bone loss. We believe that one of the ways to prevent it is to use interactive techniques. And, the development of telecommunication technologies encourages us to improve medical technologies.

Thus, the **aim** of this study was to evaluate the effectiveness of soliton in bone tissue in a preclinical study using the ANDROID technology during surgery for the maximum possible preservation of bone tissue.

Materials and methods. In laboratory conditions, on a bone preparation of a dead animal (piglet under 6 months of age), we performed an experimental dental implantation operation with the registration of the effect of physical factors on the periosteum in the implant area, for which we used phantom implants (analogous to real ones: D=3.5 mm; L=6.0 mm). When planning the laboratory experiment, it was assumed that during surgery, uncontrolled pressure (traumatic stimulus) on the periosteum occurs, which becomes a pathogenic destructive factor. To control the movement and positioning of the implant, we used our own methodology using a navigation module (patent of Ukraine No. 68641), which was integrated with a mobile phone on the ANDROID platform via a micro-USB port (2x7) type B ("Navigator UK A"). We compared the results of the experiment with the results obtained in the experiment with navigation systems integrated with a desktop computer running the WINDOWS OS via a USB port (Navigator UK).

Results. With the same rotational force in the area of the implant platform, the pressure on the bone tissue increases disproportionately, and at a certain value it is destructive. Uneven deformation of the adjacent bone structures was found. When comparing the experiments, the results are comparable, the difference in data rate is not subjectively determined. For visual examination, we used an endoscope mounted on the ANDROID platform (patent pending). In 22% of cases, we observed manifestations of bone deformation, the manifestation of soliton in the bone tissue, which was not visualized by conventional observation. The efficiency of endoscopy by the proposed method was 92%. The use of the ANDROID platform in medical navigation and endoscopy systems is relevant due to the development of telecommunication technologies.

Conclusions. The application of the author's innovations actually caused bone growth. Implant bone healing is a process of remodeling of the cancellous process, which ultimately leads to an imbalance of resorption and bone formation processes in the direction of the former. In order to prevent atrophy, preserve the height, width and shape of the cancellous process, it is necessary to carry out a set of measures, the main of which is the use of implant prostheses and bone substitutes, the formation of a labile implant depot and a cytostatic barrier complex. Their combined use changes the functionality in the biogenic aspect. The use of an improved method of radiovisiography and a modified sensor allowed to detail the bone architecture and the state of adjacent soft tissues from 44.8% to 100%. $\pm 1.5\%$ and to differentiate adjacent soft tissues, including atral ones - $67.1 \pm 6\%$. Reduce the exposure by one order of magnitude - $0.08s \pm 8\%$, according to the data on the X-ray device display.

Kilmukhametova Yu.H.

RESULTS OF CYTOLOGICAL STUDY IN EXPERIMENTAL ANIMALS WITH AND WITHOUT TREATMENT OF ULCERATIVE NECROTIC GINGIVITIS WITH A COMPLEX OF DRUGS WITH ANTIOXIDANT PROPERTIES

*Department of Therapeutic Dentistry
Bukovinian State Medical University*

Introduction. Changes in the quantitative indicators of non-specific resistance systems of the body indicate a violation of homeostasis in the body and the development of a pathological process. The state of defense systems largely determines the course and provides a predictive characteristic of the intensity and effectiveness of treatment measures. In patients with inflammatory processes of periapical tissues, there is an imbalance of factors that characterize the state of local resistance of the oral cavity and the mucous membrane of the gums. Also, quantitative and qualitative changes in indicators of phagocytosis, chemotaxis of leukocytes, secretion of cytokines, immunoglobulins, and bactericidal activity of humoral factors of the body's defense were observed.

The aim of the study was to determine changes in the quantitative indicators of non-specific resistance in experimental animals with and without treatment of ulcerative necrotic gingivitis with a complex of drugs with antioxidant properties.

Material and methods. Laboratory animals with an experimental model of ulcerative-necrotic gingivitis by chemical burn were divided into three groups: intact, control, and experimental. Animals of the control group were not treated; in the experimental group, a complex of drugs was applied to the ulcer surface, which included Thiotriazoline ointment, Zinc oxide, and 0.05% Chlorhexidine solution. In the selected periods of observation (3rd, 5th, 7th, and 10th days), cytological examination of smears was used to determine the adsorption reaction of microorganisms (ARM) by counting the number of bacteria adsorbed on the surface of each epithelial cell (based on 100 cells).

Results. At the beginning of the observation, a sharp decrease in the number of highly differentiated cells was noted in the smears of animals of the control group, cells of the III stage of differentiation prevailed, and the IDC decreased to 67.52% of the level of intact animals. In all subsequent periods, animals of the control group showed a gradual increase in the IDC index due to an increase in cells in the V stage of differentiation on the surface of the ulcer. The CDI value was