

«Stomatologiya» - илмий-амалий журнал  
1998 йилда асос солинган  
Ўзбекистон матбуот ва ахборот  
агентлиги томонидан 15 август 2007  
йилда қайта рўйхатга олинган.  
Гувоҳнома № 0289.

**STOMATOLOGIYA**  
**№ 4, 2022 (89)**

**ИЛМИЙ-АМАЛИЙ ЖУРНАЛ**

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аттестация комиссияси (ОАК)  
қарорига асосан «Stomatologiya»  
журнали Фан доктори илмий  
даражасига талабгорларнинг  
диссертация ишлари илмий  
натижалари юзасидан илмий  
мақолалар эълон қилиниши  
лозим бўлган республика илмий  
журналлари рўйхатига  
киритилган (ОАК Раёсатининг  
2013 йил 30 декабрдаги 201/3-сон  
қарори билан тасдиқланган)

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«Stomatologiya» - научно-практический журнал.  
Основан в 1998 году.  
Зарегистрирован повторно Агентством печати и информации Республики Узбекистан 15 августа 2007 г.  
Свидетельство № 0289.

# STOMATOLOGIYA

## № 4, 2022 (89)

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Оригинал-макет изготовлен в «Янги асп авлоди».

Дизайн, компьютерный набор и верстка  
Е.Алексеев  
Редактор О.А.Козлова  
Цена журнала договорная.

Публикация рекламы на коммерческой основе.

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**Mamatkulov H.A., Eshbadalov**

tozalash usullari.

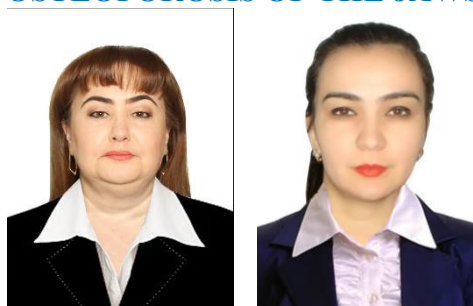
**Objective:** To study the influence of the method of surface treatment of implants on the arithmetic mean and quadratic roughness. **Material and methods:** The study of the microstructure of implant surfaces was carried out on three groups of samples. The 1st group consisted of titanium implants of Konmet LLC (titanium alloys of grades VT 1-0 and VT 1-00 (GOST 19807-91), sandblasted, the 2nd group was treated with acids, the 3rd combined, i.e. sandblasting and acid. **Results:** Implant surface sandblasting

to create additional roughness gives an arithmetic mean roughness of 15.923, rms 20.488, treatment with acid alone gives an arithmetic mean roughness of 82.647, rms roughness of 102.093, sandblasting and acid gives an arithmetic mean roughness of 16.27.127. **Conclusions:** Surface treatment of implants in a combined way, i.e. sandblasting and acid does not lead to additional roughness.

**Key words:** dental implants, surface treatment methods.

UDK: 616.314-089.843.618.176-06

## THE ROLE OF BIOCHEMICAL INDICES IN THE DIAGNOSIS OF OSTEOPOROSIS OF THE JAWS



**Pulatova B.Zh., Achilova N.G.**

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**Relevance of the topic.** Achievements of recent years in the study of molecular pathogenetic aspects of osteoporosis contributed to the search for the most specific and informative markers which reflect the intensity of remodeling processes. Although these markers are divided into synthesis and resorption markers, it should be kept in mind that under pathological conditions, when bone tissue remodeling processes are coupled and altered in one direction, any of the above markers will reflect the total rate of bone metabolism [1,3,5,7,9,10].

### Material and research methods

The planning of the intraosseous implantation surgery was performed on the basis of the data of the comprehensive examination of patients using clinical, radiological, functional and laboratory

methods. For diagnostics of osteoporosis various biochemical indices are widely used which allow to determine the variant of osteoporosis (primary, secondary). We performed biochemical tests: calcitonin parathormone and vitamin D. Menopausal women were examined and pathogenetic treatment with miacalcic + vitamin D was given [2,4,6,8].

The first group (15 people) included patients with a diagnosis of postmenopausal osteoporosis (type 1), we gave them miacalcic + vitamin D. The second group included 22 patients with a diagnosis of postmenopause, we conducted a standard treatment (type 2). The third group (control) consisted of patients without systemic bone pathology (Table 1).

Table 1

Distribution of patients by age, abs. (%)

Type	Age				Total number of patients
	40-44 years	45-49 years	50-54 years	55 years and older	
1	15 (25,0)	14 (23,33)	11 (18,33)	7 (11,67)	47 (78,33)
2	-	4 (6,67)	5 (8,33)	4 (6,67)	13 (21,67)
Total	15 (25.0%)	18 (30.0)	16 (26.66)	11 (18.34)	60 (100)

The indicated groups did not include:

- Patients younger than 40 years of age;
- In the presence of allergic phenomena;
- Acute infectious diseases;
- Benign and malignant neoplasms,

including in the anamnesis.

**Results**

Three biochemical markers of bone formation performed by osteoblasts are currently used:

1. Bone alkaline phosphatase (BAP) produced by osteoblasts and determined in serum. Specificity, no metabolism in the liver, cleared from the blood by the kidneys, approach the BAP to the ideal markers of osteoblast activity (Bettica R., Moro L., 2015; Taguchi A. et al., 2013).

2. Osteocalcin (OK) is a noncollagenous protein synthesized by osteoblasts containing carboxyglutamic acid. The latter provides high affinity (binding ability) of OK molecule to hydroxyapatite, which forms the matrix and bone mineralization. OC is released by osteoblasts during osteosynthesis and partially enters the bloodstream. In osteoporosis, the level of osteocalcin may be elevated or normal, depending on the severity of osteosynthesis processes. The pathogenetic principle of treating primary forms of osteoporosis is to prescribe drugs that normalize disturbed remodeling mechanisms. Currently, there is a wide range of drugs for the treatment of osteoporosis, to

a greater or lesser extent satisfying the criteria for the effectiveness of therapy.

In clinical practice, currently the most common synthetic salmon calcitonin (miacalcic) (Mylov N.M., 1998) The most physiological of all drugs used for the pathogenetic treatment of osteoporosis are active metabolites of vitamin Dz (Dambacher M.A., Schacht E., 2016; Rozhinskaya L.Ya., 2019; Kassern M., 2013). Based on the analysis of the results of the examination there were - allocated 3 groups of patients to whom implant treatment with the use of implants was planned,

After the examinations and determination of the diagnosis, a treatment plan was made, which included implantation surgery followed by orthopedic treatment.

During the preoperative period we performed a thorough sanitation of the oral cavity and the necessary preoperative preparation. The question about the number and localization of the implants was solved on the basis of the simulation of the situation dictated by the conditions of the oral cavity and the condition of the bone tissue of the implant site. For that purpose the size and topography of the dentition defect, the position of supporting teeth, the degree of atrophy of the alveolar process, the type of bite, the shape of the occlusal surface, etc. were determined on the models (Table 1).

Table 2

Distribution of patients by age, abs. (%)

Index	Total number of patients	Group 1, early menopausal period (type 1)	Group 2, postmenopausal osteoporosis (type 2)	Group 3, no systemic pathology bone tissue
Total	60 (100)	15 (25.0)	22 (36.67)	23 (38.33)

Patients in all there groups underwent implantation according to the classic two-step technique, during which screw implants were placed. The number of implants depended on the number of teeth to be replaced and the amount and quality of bone in the implant area. The length of the implants was selected depending on the height of the alveolar bone. All in all, 103 implants were placed, including 29 (28.2%) in Group 1 patients, 36 (35.0%) in Group 2, 38 (36.8%) in Group 3.

To create the optimal micro-environment at the boarder of the implant and the bone tissue we used the intraosseous implants with the developed relief surface. From the point of view of the modern concepts of bone tissue reparation the surface roughness of the implants affects the qualitative and quantitative characteristics of the osseointegration, especially in case of systemic disturbance of the mineral metabolism.

Due to low bone tissue resistance at the stage of implant placement in case of

osteoporosis we used a complex approach aimed at increasing the implant stability.

The surgery was carried out with maximal sparing of the bone and minimal damage to soft tissues, which allowed us to reduce the zone of tissue necrosis around the implant and minimize microcirculatory disorders.

Finally, the rules of asepsis and antisepsis were carefully followed during the surgery, abundantly irrigating the operating field with a chilled physiological solution to avoid temperature effects on the bone during bone bed preparation. Implants of maximum length and diameter were used, observing the distance of 2 mm when placed close to such anatomical formations as maxillary sinuses, nasal cavity floor, mandibular nerve canal, mental orifice. The thickness of the bone walls around the implant was at least 1 mm and the distance between the implants or between the implants and the neighboring teeth was at least 2 mm. In the vast majority of cases we used implants of medium length and diameter (4.0x10 and 3.8x11 mm). Application of larger implants was not usually allowed by the significant vertical and horizontal bone atrophy observed in many patients.

After completion of the implant integration period, a repeat clinical, radiological and instrumental examination was performed.

### **Conclusion**

To improve the quality of osseointegration of implants in patients with osteoporosis, the period from implant placement to fixation of an orthopedic structure was extended, the second stage was performed after 7-8 months on the upper jaw and after 5-6 months on the lower jaw. Introduction of pathogenetically based approach to treatment will allow to achieve significant progress in the care of patients with primary osteoporosis.

### **References**

1. Adams H.P.J., Nelson L.M. Adolescent girls, the menstrual cycle, and bone health // *J. Pediatr. Endocrinol. Metab.* – 2031. – Vol. 16 (Suppl. 3). – P. 673-681
2. Eisman J.A. Pharmacogenetics of the vitamin D receptor and osteoporosis // *Drug. Metab. Dispos.* – 2019. – Vol. 29, №4 (Pt. 2). – P. 505-512.
3. Smetnik V.P. Postmenopausal osteoporosis // *Medicine climacteria*; Ed. V.P. Smetnik. – Yaroslavl: LLC "Publishing House Litera", 2016. – P. 656-686.

4. Lindsay R., Kleerekoper M. Estrogens for the prevention of osteoporosis; Ed. by R. Lindsay // *Drugs Osteopor.* – 2015. – P. 1-27.

5. Davas I., Altintas A., Yoldemir T. et al. Effect of daily hormone therapy and alendronate use on bone mineral density in postmenopausal women // *Fertil. Steril.* – 2016. – Vol. 80, №3. – P. 536-540.

7. Grados F., Brazier M., Kamel S. et al. Effects on bone mineral density of calcium and vitamin D supplementation in elderly women with vitamin D deficiency // *Joint Bone Spine.* – 2013. – Vol. 70, №3. – P. 203-208.

8. Achilova N.G., Pulatova B.J. Pre-operative training of patients with osteoporosis during premenopause when planning dental implantation // *Central Asian J. Med.* – 2021. – №11. – P. 47-58.

9. Achilova N.G., Pulatova B.J. To the question of preparation of patients with osteoporosis during the premenopause when planning dental implantation // *Orient. J. Med. Pharmacol.* – 2022. – Vol. 17, №10. – P. 82-92.

10. Achilova N.G., Pulatova B.J. Medical correction in the planning of dental implantation in patients with osteoporosis in the menopausal period // *Actual problems of maxillofacial surgery: Materials of the International scientific and practical online conference.* – Tashkent, 2021. – №3. – P. 56-59.

**Актуальность темы.** Достижения последних лет в изучении молекулярно-патогенетических аспектов остеопороза способствовали поиску наиболее специфичных и информативных маркеров, отражающих интенсивность процессов ремоделирования. Хотя эти маркеры подразделяются на маркеры синтеза и резорбции, следует иметь в виду, что при патологических состояниях, когда процессы ремоделирования костной ткани сопряжены и изменяются в одном направлении, любой из вышеперечисленных маркеров будет отражать суммарную скорость костного метаболизма. **Материал и методы:** обследованы женщины в климактерическом периоде, у которых планировалась операция внутрикостной имплантации. 1-я группа – 15 пациенток с диагнозом постменопаузальный остеопороз (1-й тип), которым мы назначали миакальцик + витамин Д, 2-я группа – 22 пациентки с диагнозом



постменопауза (2 тип), которые получали стандартное лечение, 3-я группа (контрольная) – пациентки без системной костной патологии. **Результаты:** для улучшения качества остеоинтеграции имплантатов у пациенток с остеопорозом был увеличен период от установки имплантата до фиксации ортопедической конструкции. Второй этап выполнялся через 7-8 месяцев на верхней, через 5-6 месяцев – на нижней. челюсти. **Выводы:** внедрение патогенетически обоснованного подхода к лечению позволит добиться значительных успехов в лечении больных с первичным остеопорозом.

**Ключевые слова:** женщины, постменопаузальный остеопороз, внутрикостная имплантация.

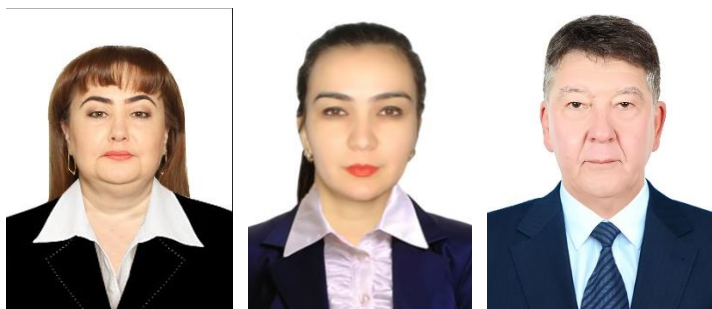
**Relevance of the topic.** Achievements of recent years in the study of molecular pathogenetic aspects of osteoporosis contributed to the search for the most specific and informative markers which reflect the intensity of remodeling processes. Although these markers are divided into synthesis and resorption markers, it should be kept in mind that under pathological conditions, when

bone tissue remodeling processes are coupled and altered in one direction, any of the above markers will reflect the total rate of bone metabolism. **Material and methods:** The women in the climacteric period were examined, in whom the operation of intraosseous implantation was planned. group 1 - 15 patients diagnosed with postmenopausal osteoporosis (type 1), to whom we prescribed myacalcic + vitamin D, group 2 - 22 patients diagnosed with postmenopause (type 2), who received standard treatment, group 3 (control) - patients without systemic bone pathology. **Results:** To improve the quality of implant osseointegration in patients with osteoporosis, the period from implant placement to fixation of the orthopedic structure was extended. The second stage was performed after 7-8 months on the upper one, after 5-6 months - on the lower one jaws. **Conclusions:** The introduction of a pathogenetically sound approach to treatment will make it possible to achieve significant success in the treatment of patients with primary osteoporosis.

**Key words:** women, postmenopausal osteoporosis, intraosseous implantation.

UDK: 616.314-089.843-06]-092-055.2

## THE EFFECTIVENESS OF CALCIUM AND VITAMIN D PREPARATIONS IN THE TREATMENT OF OSTEOPOROSIS IN THE EARLY MENOPAUSAL PERIOD



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**The relevance of the topic.** In recent years, considerable attention has been paid to clarifying the relationship between metabolic diseases of bone tissue and changes in the bone tissue of the jaws. It would seem that the systemic processes occurring in the body cannot but affect the condition of the tissues of the dental system. However, the association between osteoporosis and oral health remains a controversial issue. Normally, the height of the alveolar ridge is maintained by a physiological

balance between bone formation and resorption.

Some studies have found that the treatment of osteoporosis improves the condition of periodontal tissues J. Wactawski-Wende et al. (2022) believe that in postmenopausal women, the loss of alveolar height and the number of lost teeth depend on the severity of osteopenia. According to E.A. Krall (2011), M.S. Reddy; (2012), a decrease in bone mineral density in patients with osteoporosis, both in men and women, is a risk factor for the development of