

number of destroyed cells was observed. The number of cells with signs of destruction reached  $8.2 \pm 0.31\%$ , which was 2 times higher than the healthy indicator ( $4.8 \pm 0.1$ ).

**Conclusions.** Thus, the cytograms of patients with periodontitis combined with fractures of the lower jaw were inflammatory-degenerative type and reflected the presence of destructive processes at the level of the dentogingival joint and alveolar bone.

#### INFLUENCE OF ANATOMIC PARAMETERS OF THE ALVEOLAR PROCESSES OF THE UPPER JAW ON THE SIZE OF DENTAL IMPLANTS

*Erokina N. L.\**, *Lepilin A. V.*, *Rogatina T. V.*,  
*Bakhteeva G. R.*, *Baryl'nik Yu.B.*

V. I. Razumovsky Saratov State Medical University,  
Saratov, Russia  
\* [nadleo@mail.ru](mailto:nadleo@mail.ru)

**Background.** The anatomical parameters of the alveolar processes determine the possibility of using dental implants in the treatment of patients.

**Aim.** Often the complexity of dental implantation occurs in the area of premolars and molars of the upper jaw due to the proximity of the maxillary sinus.

**Material and Methods.** The analysis of computed tomography data of 30 patients (men and women) of 2 mature periods was carried out, which were subsequently followed by dental implants «oss-tem» on the upper jaw in the premolar area and the first molar.

**Results and Discussion.** In the area of the first premolar, the average height of the alveolar process was  $11.9 \pm 0.31$  mm, which made it possible to establish implants in 50% of cases 11.5 mm long, 30% — 10 mm. In 10% of cases, implants were 8.5 mm long, in 10% — 13 mm. Most often implants were used with the smallest diameter of 3.5 mm (40%). In the area of the second premolar, the average height of the alveolar process was  $9.7 \pm 0.27$  mm, so in 40% of cases, implants were 7 mm long, 30% — 8.5 mm, 20% — 10 mm, 10% — 13 mm. The diameter of the implants was 4 mm in 50% of the cases. In the area of the first molar, the average height of the alveolar process was  $4.5 \pm 0.15$  mm, so 50% of the patients required an increase in the height of the alveolar process before the installation of the implants, and the operation of sinus lifting. In the area of the first molars, implants with a length of 10 mm, in 16.5% — 8.5 mm, in 16.5% — 11.5 mm were installed in 67% of cases. The diameter of the implants in 67% of cases was 5 mm.

**Conclusions.** Dimensions of the alveolar process determine the choice of dental implants in the area of premolars and molars of the upper jaw. The lowest height of the alveolar process is noted in the area of the first molar, which requires preparatory operations before dental implantation.

#### USING OF SYNTHETIC AND XENOGENIC OSTEOPLASTIC MATERIALS FOR THE RESTORATION OF ALVEOLAR BONE VOLUME IN JAWS BEFORE DENTAL IMPLANTATION

*Ershova A. M.\**, *Tarassenko S. V.*

Sechenov First Moscow State Medical University  
(Sechenov University), Moscow, Russia  
\* [annushka1412@mail.ru](mailto:annushka1412@mail.ru)

**Key words:** *sinus lift, maxillofacial area, dentistry, osteoplastic materials*

**Aim.** To increase the efficiency of treatment of patients with dental failure.

**Material and Methods.** Under the supervision were 33 patients aged 21 to 65 years, who had a sinus lift with osteoplastic material and 6 months after dental implantation in the area of bone grafting. In group 1 (17 patients), synthetic osteoplastic material (contains 60% hydroxyapatite, 40% beta-tricalcium phosphate, collagen type 1) was used, in group 2 (16 patients), the bone defect was filled with xenogenic osteoplastic material (bovine hydroxyapatite).

**Results and Discussion.** All patients had no specifics in the postoperative period. According to CT-scans in patients of 1<sup>st</sup> group the alveolar jaw bone height before the treatment was an average of  $1.61 \pm 0.14$  mm, in 6 months after the operation was  $15.25 \pm 0.23$  mm. In 2<sup>nd</sup> group the alveolar bone height before treatment was  $1.89 \pm 0.13$  mm on the average, after the operation was  $12.79 \pm 0.07$  mm. According to the histological study of bone tissue obtained in patients of 1<sup>st</sup> group, the formation of a newly formed spongy bone was noted mainly at the edges of the biopsy specimen. In the center of the biopsy bone formation is absent. In patients of the 2<sup>nd</sup> group about 30% of the shear area is occupied by the spongy bone tissue, the rest of the defect is filled with osteoplastic material.

**Conclusions.** A comparative analysis of the use of synthetic and xenogenic osteoplastic materials after sinus lift has showed almost identical results.

#### HISTOLOGICAL EFFECTS OF CHRONIC CONSUMPTION OF AQUEOUS COLA NITIDA EXTRACT ON LATERAL GENICULATE BODY OF ADULT ALBINO WISTAR RATS

*Eteudo A. N.*, *Njoku C. O.*, *Elom S. C.*, *Igwe C. E.*

Ebonyi State university, Abakaliki, Nigeria  
[eteudoan@yahoo.com](mailto:eteudoan@yahoo.com)

**Key words:** *histology, Cola nitida, lateral geniculate body, Wistar rats*

**Aim.** Cola nitida is a well documented natural stimulant with abundance of caffeine which excites the central nervous system. The purpose of this study is to assess the histological effects of aqueous cola nitida extract on the lateral geniculate nucleus of adult albino wistar rats. A total of 16 male Albino wistar rats, weighing 97 g to 160 g were used.