connection of variable size. The level of the interconnection may be different: in the hand, wrist or forearm. An interconnection between flexor pollicis longus and flexor digitorum profundus is named Linburg—Comstock variation. This variation often involves the flexor digitorum profundus of the index finger and on clinical examination is characterized by a simultaneous flexion of the forefinger during the active flexion of the thumb. The tendinous interconnections between flexor digitorum superficialis and flexor digitorum profundus are also frequent, especially between flexor digitorum superficialis of the little finger and adjacent fingers. Presence of the tendinous interconnections is asympthomatic in most of cases but sometimes they may limit precise movements of the involved fingers, may cause career-threatening disabilities or could complicate some hand injuries. In some patients tendinous interconnections can cause pain and swelling in the palmar aspect of the hand and wrist, tenosynovitis or carpal tunnel syndrome.

PREVALENCE OF THE PALMARIS LONGUS AND ITS IMPACT ON GRIP STRENGTH

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Key words: *forearm, palmaris longus muscle, muscle absence, grip strength*

Background. Palmaris longus muscle is the muscle of the anterior compartment of the forearm. Its contraction helps the flexion of the wrist and thumb abduction. It is often used in reconstructive surgery of the hand, eyelids and lips. This is one of the most variable muscles in our body. The purpose of this study was to determine the frequency of the palmaris longus muscle and its effect on the grip strength in examinees.

Material and Methods. The research was performed on 100 males and 100 females, average age of 19.46 years. Presence of the palmaris longus muscle was tested with standard and additional clinical tests, while the grip strength was tested with electronic manual dynamometer.

Results and Discussion. Bilateral presence was found in 132 (66%) subjects. Unilateral absence was found in 32 (16%) subjects, while bilateral absence in 36 (18%) subjects. Bilateral absence was noted in 12% in females and 24% in males. Unilateral absence on the left side was observed in 11% of women and 10% of men, while unilateral absence on the right side was equal in both genders (8%). The average value of the grip strength on right side was 40.77±11.60 kg and 38.43±10.93 kg on left side.

Conclusions. Compared to the unilateral, bilateral absence was more prevalent. Unilateral absence was significantly more present in the left forearm. In males, bilateral absence was statistically higher compared to the unilateral absence. Muscle absence in the left forearm was significantly more frequent compared to the right forearm. In females, there were no statistically significant differences between bilateral or unilateral absence. Bilateral absence was significantly more frequent in males. According to the results of this study grip strength of the hand was not affected in the case of palmaris longus absence in both genders.

CYTOMORPHOLOGICAL FEATURES OF THE CONTENTS OF PERIODONTAL POCKETS OF PATIENTS WITH PERIODONTITIS IN FRACTURES OF THE LOWER JAW

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Key words: *cytomorphological features, periodontal pockets, periodontitis, fracture of the lower jaw*

Aim. To study the cytomorphological features of the contents of periodontal pockets of patients with periodontitis in fractures of the lower jaw.

Material and Methods. Thirty patients with periodontitis combined with fractures of the lower jaw were examined, who underwent traditional treatment using dental splints for immobilization of fragments of the jaws.

Results and Discussion. The patients revealed cytomorphological features in the contents of periodontal pockets. Among the cellular elements, mainly polymorphonuclear leukocytes were determined. Their number (43.7±1.3%) was significantly higher than that of healthy people. The cytoplasm of most neutrophils was vacuolated, had a toxic granularity, degenerative changes in the form of fragmentation were observed in the nuclei, part of the cells were completely destroyed. Monocytes, lymphocytes, whose number was increased, were present in the studied preparations. In the cytograms there was a microbial flora, located mainly outside the cells and represented by cocci, fungal mycelium, leptotrix type filaments, chopsticks, less often — protozoa. In the patients examined, a decrease in the number of neutrophils in the state of phagocytosis was observed, and phagocytosis was often not completed. In the population of epithelial cells, an increase in the smears of epithelial cells, aggregated in the seams, as well as signs of destruction and dystrophy. There were cells with signs of degeneration, having vacuolization of the cytoplasm and nuclei, an increase in the

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

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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 «osstem» 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±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±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±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

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Key words: *sinus lift, maxillofacialal 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 xenogeneic osteoplastic material (bovine hydroxyapatite).

Results and Discussion. All patients had no specifics in the postoperative period. According to CT-scans in patients of 1st group the alveolar jaw bone height before the treatment was an average of 1.61±0.14 mm, in 6 months after the operation was 15.25±0.23 mm. In 2nd group the alveolar bone height before treatment was 1.89±0.13 mm on the average, after the operation was 12.79±0.07 mm. According to the histological study of bone tissue obtained in patients of 1st 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 2nd 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 xenogeneic 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

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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.