Aim of the study. The evaluation of the effectiveness of surgical treatment dynamics and the development of diagnostic and therapeutic principles accordingly.

Materials and methods. In this study were included 853 of patients treated in the Republican Dental Clinic during one year -2017, 481 of them were men and 372 women aged from 18 to 70; Out of 853 of patients, 345 were with apical chronic periodontitis, 842 extractions were performed - 247 of the them because of apical chronic periodontitis.

Results. After statistical analysis of 345 patients with apical chronic periodontitis, information collected from the observation sheets of the Republican Stomatologic Polyclinic, we noticed an increase of the periapical lesions with the aging.

Conclusions. In case of failure of endodontic treatment and the impossibility of the removal of the periapical process using other methods, it was concluded that apical resection is a rational method of treatment that patients easily approve. Surgical treatment methods have satisfactory results, which allows us to keep the tooth in the oral cavity and perform proper function. Nevertheless firstly, we have to opt for a qualitative endodontic treatment before a surgical method. Only after the failure of the endodontic treatment, we can choose a surgical one.

Key words: apical chronic periodontitis, periapical lesions, surgical treatment

291. THE USE OF SURGICAL GUIDES IN ORAL IMPLANTOLOGY

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Introduction. In recent years, the development of computer-aided design / computer – assisted manufacture (CAD/CAM) technology has allowed great improvements. Computer assisted approaches have enhanced planning and provided accuracy in transfering the virtual plan to the surgical area, which is higher compared to freehand protocols. Thus, a strong cooperation between the prosthodontist, surgeon, and dental technician through the developed technology can lead to precise treatment planning, predictable, and accurate results.

Aim of the study. To assess the applicability of surgical guides in implant-prosthetic rehabilitations of edentulous patients.

Materials and methods. The study is based on clinical and paraclinical analysis of 10 patients (4 men and 6 women, mean age 53 ± 2.4) with different types of edentulism rehabilitated using dental implants by All-on-4 concept.

The virtual planning and surgical guide printing were made using the Blue Sky Plan software. A special attention was paid to the positioning of the distal angulated implants in close proximity to the mental foramen. The postoperative CBCT was analysed to appreciate the accuracy of the obtained position of implants upon initial treatment plan.

Results. The results were uneventful. All the implants were installed according to the initial plan made by the medical team. However, in one case, due to a short passive part of the surgical guide and a small number of teeth supporting it, the drilling process required complementary checking of the implants area due to the moving of the surgical guide. Another difficulty was observed during the drilling process of the distal implants caused by the height of the guiding drills and the limited mouth opening.

Conclusions. The use of surgical guides in implants placement lead to a good and precise positioning of implants especially in cases with limited bone offer. This method allows to insert implants in exact required angulation and to avoid some complications like nerve damage. However, appropriate design of the surgical guide as well as the local limitations of the mouth should be taken into consideration in order to achieve the desired results.

Key words: implantology, surgical guides, CBCT, dental implants, All-on-4