

Thesis summary

Research on some preprosthetic surgical interventions in conventional oral rehabilitation

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Despite progress in diagnostic methods, treatment and monitoring of various diseases, achieved in recent years in dentistry, a significant percentage of the population experiencing functional disorders because of partial edentation. Oral rehabilitation from the prosthodontists point of view, at many of these patients is complicated by changes in the abutments location, dental structure, volume, shape and quality of alveolar ridge, and the imperfection of soft tissues.

Preprosthetic surgery remains a distinct chapter in the oro-maxillo-facial surgery, with the objective to obtain a prosthetic field suitable for oral rehabilitation, accomplishing ideal characteristics.

The general part of this thesis summarizes the facts from the dental literature, about the approaching of a patient and performing preprosthetic surgical interventions, the frequency of these interventions in current practice, the results obtained and the indications of the final prosthetic rehabilitation treatment.

The personal part of this thesis presents:

- 2 statistical studies about the frequency of certain preprosthetic surgical interventions
- 2 statistical clinical studies with clinical involvement and innovation within the topic
- Clinical cases for the synthesis and presentation of the application of the surgical interventions with preprosthetic involvement

For statistical interpretation of the results we used GraphPad InStat 3 software and Excel utility.

The first study consists of a retrospective analysis based on data collected from six years of case history of the Clinic of Oral-Maxillofacial Surgery in Targu-Mures, including 3202 patients with apiciectomies and some analysis based on a questionnaire (on preprosthetic interventions made by private practice dentists in Mures County).

Results based on the retrospective study shows that the most affected teeth by apical resection are the upper front area, most of whom was involved the lateral incisor, with a higher proportion of females, patients from urban areas and the age range of 20-50 years. Results on the evaluation questionnaires showed that most respondents were dentists who are not performing preprosthetic surgery. In terms of frequency, apicectomy on premolars were was found to be higher in cases were they were abutments.

The second study included 22 patients from the private practice, randomly selected, with apicectomies performed and electromyographic examination accomplished before and after the surgery. The results obtained in this study shows that in addition to reducing the quality of implantation and the prosthetic value of the involved teeth, the apicectomy is directly affecting the neuromuscular masticatory behavior, which has a particularly important application in the field of therapy on implants.

The third study has as objective to evaluate the correlation between changes in tooth mobility and open flap periodontal surgery, a way of treatment of chronic marginal periodontitis. Results from this study suggest that Periotest (instrument used to assess tooth mobility) as a prognostic tool in the evolution of periodontal disease proves its value also in the case of open flap peiodontal surgery, both by objectifying and quantifying the pathological fact of tooth mobility and by reference to a scale of values that determine a realistic assessment of the success or failure of the intervention.

The fourth study is a retrospective analysis based on data taken from the case history of the Clinic of Oro-Maxillo-Facial Surgery in Targu-Mures, during 1990-2011, including the cases of patients with preprosthetic surgical interventions. 347 patients were selected with various lesions requiring preprosthetic surgical intervention . Based on this study was shown that the most commonly used intervention in this group of patients was the surgery of epithelial-connective hyperplasia with predominance in females, from the age group of 50 years and patients from rural areas. Data from this study is highlighting the inadequacy in approaching these interventions.

The last chapter, entitled "Clinical Cases" is a synthesis of certain interventions wit preprosthetic involvement and their applicability in current practice.

Keywords: surgical preprosthetic treatment, apicectomy, open flap periodontal surgery, prosthetic rehabilitation