

UNIVERSITY OF MEDICINE AND PHARMACY OF TÎRGU MUREŞ

COLLEGE OF DENTAL MEDICINE

PROSTHODONTICS DEPARTMENT

**SOCIAL, CLINICAL AND EPIDEMIOLOGICAL ISSUES IN
ELDERLY EDENTULOUS TREATMENT**

(ABSTRACT)

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Keywords: *edentulous, elderly, quality of life, social issues, complete denture, overdenture, therapeutic index*

Introduction

The Third Age, the over 60 years old stage of life is a fragile one due to all involutive processes. Dental medicine is also integrated in synthesize geriatric prophylactic programs all other medical branches in the study of both normal and pathological aging processes. The need of multidisciplinary approach of dental prosthetic therapy is in need of being based on scientific data, well documented and sustained of real data.

World Health Organisation refers to health as a complete mental, social and physical state of being not just the absence of illness. This modern approach applies also to the evaluation of the oral health status.

The modern tendency of research in removable prosthodontics focuses on the superiority of overdenture or of the fixed implant supported bridges over the classical therapeutical methods like the complete acrylic denture. Without any doubt we consider, as we demonstrate it ourselves, the implant supported prosthetic framework a viable treatment approach in dealing with edentulousness and especially the mandibular one.

Thou, in our country, the acrylic denture is still the main choice of treatment for the edentulous elderly regarding the benefit-cost ratio. With an estimated prevalence of edentulousness of 20-30% of the population, predicting the impact of a correct prosthodontic treatment is the main desideratum of a program of health and resources planning, evaluating the concept of quality of life and educational awareness both for patients and practitioners.

So in this thesis we tried to cover both epidemiological and clinical data and present both possibilities of treatment, with implants or the conventional one, emphasizing the social aspect of improving the quality of life and experiencing a method, although well known, very little accessible, that gives the desired result especially in difficult cases, in the clinical phase of establishment of craniomandibular relationship, the electromyographic evaluation.

The thesis consists of 2 main parts: first part is the **general review** part and the second is the **personal experiment** part , that spread over 5 chapters.

General review part consists of 2 chapters that summarize the literature data regarding both the conventional treatment approach or the implant-based one, viewed through the improvement of quality of life of the elderly edentulous social aspect.

Chapter 1 – SOCIAL EVALUATION OF THE COMPLETE EDENTULOUSNESS TREATMENT ISSUES WITH CONVENTIONAL ACRYLIC DENTURES: EPIDEMIOLOGICAL ANALYSIS WITH QUALITY OF LIFE INDEXES (LITERATURE REVIEW) offers an international data perspective in evaluating the impact of complete edentulousness and also of the conventional therapy using both the social and the functional aspect of the improvement in quality of life and oral health, using statistical indexes.

Chapter 2 – STATE OF KNOWLEDGE REGARDING THERAPEUTICAL CHOICE IN THE TREATMENT OF MANDIBULARY COMPLETE EDENTULOUSNESS USING 2 INTERFORAMINAL PLACED SCREW-TYPE IMPLANT-SUPPORTED OVERDENTURE presents a short review of the anatomic and functional modification that can complicate the conventional treatment and the therapeutic option of the 2 interforaminal placed screw-type implant-supported overdenture as a viable option, validated with quality of life evaluation indexes.

Personal part consists of 3 chapters describing 2 clinical and epidemiological studies of the two therapeutical choices and al last experimental chapter of using the electromyography in establishing the craniomandibular relationship.

Chapter 3 – STUDY OF THE CLINICAL AND SOCIAL ISSUES OF LIFE IMPROVEMENT AFTER CONVENTIONAL DENTURE THERAPY starts from the presumption that dentures improve quality of life of the patient and uses as an analysis tool a QHQRoL type questionnaire based on the Allan-Locker model of 2002, OHIP-Edent. The results of the study were that indeed the conventional dentures improve greatly de quality of life of the elderly edentulous patient and also showed that the

OHIP-Edent can be used also as an evaluating or a predicting tool for the outcome of the treatment and as a quantifying method of the patient's satisfaction in the quality of life improvement.

Chapter 4 – COMPARATIVE STUDY OF PATIENT SATISFACTION AND CLINICAL EVALUATION OF THE CONVENTIONAL DENTURE PATIENTS VERSUS THE 2 IMPLANT SUPPORTED OVERDENTURE ONES starts also from the presumption that there is a great improvement in quality of life of the patient with implant supported overdenture especially in the case of mandibular complete edentulousness even in the case of using only 2 implants with interforaminal placement. The study was made using 2 similar groups that received conventional dentures or overdentures and comparing the results both of the satisfaction but also the problems that occur after prosthetic therapy. Data was quantified using a OHRQoL type index and statistical analysis. Results of the study shows positive improvement in comfort and functionality reported by the overdenture group, fact that determined us to recommend, if all the surgical requirements are met, this therapeutical approach as the best choice of the mandible complete edentulousness.

Chapter 5 – CLINICAL APPLICATIONS OF THE NEUROMUSCULAR DENTAL MEDICINE IN THE CRANIOMANDIBULAR RELATIONSHIP ESTABLISHMENT STAGE DURING THE TREATMENT OF ELDERLY EDENTULOUS has as a purpose the possibility to examine this method of investigation in achieving optimal results through global investigation of mandible mobilizing muscles and comparing them to ones resulting from clinical methods. The results of this experiment entitle us to recommend the corroboration between electromyographic investigation and clinical data for best results. We also recommend the method as a scientifically probity of the therapy, in the context of muscle-guided central position concept and its application in the elderly edentulous treatment.

There are 10 **general conclusion** at the end of the personal part that derive from our investigation and are in a close relationship with the motivation of our research, that of evaluating the social aspect of life-improvement quality after the prosthetic treatment,

in any form, of complete edentulous patients over 60 years old and the evaluation of the electromyographic approach versus the clinical one in craniomandibular relationship establishment. In current conditions correct evaluation of the epidemiological impact of complete edentulousness at national level, methods of treatment, needs and social effects is more than welcome, locally, nationally and internationally. That can be helpful in implementing prophylactic programs that address to the elderly population. Role of the university is both as promoter and trainer for the oral health promotion.

References consist of 160 titles and annexes consist of 3 articles published in CNCSIS papers as well as all questioners or other instruments used during our research.