

## QUALITY OF LIFE IN EDENTULOUS PATIENTS WITHOUT ANY PROSTHESIS IN THE SANODENTAPRIM PROGRAM

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**ABSTRACT.** The overall goal in medicine is prevention, but in dentistry, due to the inefficiency of prophylactic and therapeutic methods owing to various factors and reasons, we find ourselves again in the restorative period. Full edentulous is perhaps the most mutilating pathological state of the stomatognathic system because it disrupts all functions, with consequences for the entire organism. For this reason the ultimate goal of prosthetics is improving the patients' quality of life through the rehabilitation of the stomatognathic system functions and aesthetic restorations.

**Keywords:** *totally edentulous, chewing disorders, psysionomical disorders, phonetic disorders, psychiatric disorders, quality of life.*

**ZUSAMMENFASSUNG.** "Vorbeugung ist die beste Medizin" ist aber in der Zahnmedizin aus verschiedenen Ursachen wegen Ineffizienz von allen prophylaktischen und therapeutischen Methoden in der restaurativen Periode geraten. Totale Zahnlosigkeit und die damit verbundenen morphologischen

Veränderungen der oralen Hart- und Weichgewebe können zu funktionellen, ästhetischen und/oder psychosozialen Beeinträchtigungen des betroffenen Patienten führen. Deshalb die Zahnprothetik ist der Endzweck und Endziel für die Verbesserung des Lebensniveaus der Patienten mittels ästhetische Rehabilitation.

**Schlüsselwörter:** *totale Zahnlosigkeit, Kaustörungen, körperliche Störungen, phonetische Störungen, psychische Störungen, Lebensniveau.*

### 1. Introduction

Total edentulous is characterized by the absence of all periodontal dental units from one or both jaws, with consequent disruption of essential functions of the stomatognathic system: mastication, phonation, physiognomy. The therapy of total edentulous continues to preoccupy specialists everywhere, being considered an area of particular difficulty, as it not limited to the conception and realization of a total mobile prosthesis, but constitutes a true specific therapy which addresses one of the most complex and little known impairments. The onset of total edentulous must be regarded as the beginning of an evolving process of disruption

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of the physiological balance, generated by the constant aging of the anatomical structures of the entire organism, with implications over the dento-maxillary apparatus, an aspect which can cause a permanent stress which places older persons in particular in a state of psychosomatic instability (Jeremia, 1999).

Devin, in 1973, stresses the fact that the mental factor dominated the treatment of total edentulous, a reason which forces the practitioner to research and discover the deep personality of total edentulous in order to intervene efficiently in solving affective and prosthetic problems with a triple aim: mastication, phonation, and aesthetics.

*Masticating disorders* are present in edentulous patients without any prosthesis. The impossibility of grinding food forces them to consume only soft foods, the nutritious effect of the latter decreasing considerably (Negucioiu, 1999). In these circumstances, there appear frequent gastro-intestinal ailments, with the consequent weakening of the organism (Terezhalmay G.T., 1989). The impairment of the digestive tube is also caused by the chronic trauma of the gastric mucosa by food fragments insufficiently broken down and in salivated, which leads to a gastric hyper secretion and an increase in stomach motility. Professor Huțu, in his paper "The Evaluation of the Risk of Malnutrition in the Partial Movable Edentulous With Prosthesis" states that the nutritious needs for persons aged over 50 vary according to the general state of health, their level of physical and intellectual activity, and their level of individual education.

However, calories consumption for people 50-65 years old, of 1800-1900 kcal for women and 2000-2300 kcal for men, is reduced at 65-75 years of age to 1300 kcal for women and 1800 kcal for men. For totally or partially edentulous patients, with or without prosthesis, patients who in most cases are of old age, the supplying of food is closely related to the dental status and the masticating efficiency. The edentulous state reduces the pleasure of eating favorite foods, limits the diet and makes it monotone, eliminates part of the fruits and raw vegetables which contribute their share of mineral salts and vitamins. On long term, such a diet leads to the onset of the malnutrition symptom, with direct repercussions over the stomatognathic system. Almost half of the older individuals frequently present a nutritional risk with the installation of the symptomatology of malnutrition, a risk which is also influenced by the chronic disorders specific for this age group, especially by the degenerative disorders. A diet low in calories, proteins, vitamin A, ascorbic acid, the B vitamin complex, is present in bearers of mobile acrylic prosthesis. The qualitative and quantitative reduction of the diet is often caused by the instability of prosthesis on the prosthetic field, an instability which causes foods not to be fully masticated, and softer foods, richer in high energy releasing carbohydrates, to be preferred in these cases.

Rapidly produced total edentulous sets off a serious *physionomical disorder* by modifying the relief of the small parts of the face, with the deepening of the peribucal ditches, the disappearance of the lips' redness, causing the unsettling apparition of the dominant aspect of aging (Balaceanu, 1998). All these

modifications give a characteristic aspect to the total edentulous of both jaws, marked by the recession of the inferior floor of the face, with the advancing of the chin towards the tip of the nose, an aspect similar to the bird profile. In the case of the slow onset of the total edentulous, the transformation of the partially edentulous patient (especially the subtotal one) with prosthesis into total edentulous does not cause notable physiognomical disorders, unless the last teeth were frontal (Bratu, 2005).

### ***Phonetic disorders***

The mouth cavity has an essential role in the emission of phonetically articulated sounds. Unarticulated phonetic sounds issued through the vibration of vocal chords of the larynx will be transformed at the level of cavities (mouth, nasal, pharynx) in articulated phonetic sounds. In this transformation an essential role is played by the mouth cavity with its comprising elements: tongue, soft palate, hard palate, the lips and teeth. The loss of teeth modifies the phonic tube represented by the mouth cavity, and the tongue no longer encounters the support it rests on when emitting certain consonants called dental. The installation of the phonic modifications is done gradually, but becomes characteristic with the disappearance of all the teeth (Coca I. 1996). Thus, immediately after the extraction, the phonation is gravely affected which necessitates that a prosthesis should be applied immediately in certain cases. In the case of patients without prosthesis, with the passing of time the phonation can be compensated to a great extent. M. Negucioiu explains this fact through the mechanism of auditory feed-back through which the phonetic organs receive impulses from the cortex for the correction of phonetic articulation.

### ***Mental disorders***

The infirmity caused by masticating, physiognomical, and phonetic disorders may affect the state of the central nervous system as well. Psychic modifications appear first and foremost because of the absence of teeth from the arches, which brutally installs the condition of infirmity, visible from the level of the mouth cavity. The psychosomatic aspect of the face involves a state of frustration of the total edentulous patient with their sentimental or daily life. The limiting or absence of the smile in the totally edentulous patient due to the dysphysiognomic aspect which occurs, the repeated hesitations in openly expressing feelings of joy, affection, change the social status of the patient in family, professional, or social relationships (Giddon D., 1980).

The condition of total edentulous involves an infirmity which can often appear brutally, following dental extractions, an infirmity which cannot be hidden or removed immediately. It is felt objectively and subjectively by the patient and noticed by their peers. The lack of professional or social usefulness sets in for the patient or, in some professions, even the retreat into intimacy until the treatment of

the edentulous.

The psychic picture becomes more salient with age, with the diminishing of physical capacity, with the onset or the worsening of certain general diseases, which generally lead to desperation and to a state of interior conflict or conflict with those around.

## **2. Objectives**

In this study I have set out the following *objectives*:

- To analyze the subjective assessments of totally edentulous patients concerning masticating performance;
- To follow the physiological modifications manifested as a consequence for the condition of being edentulous;
- To visualize the way in which the social life of the totally edentulous patient is affected before the prosthesis is applied;

## **3. Sources and Method**

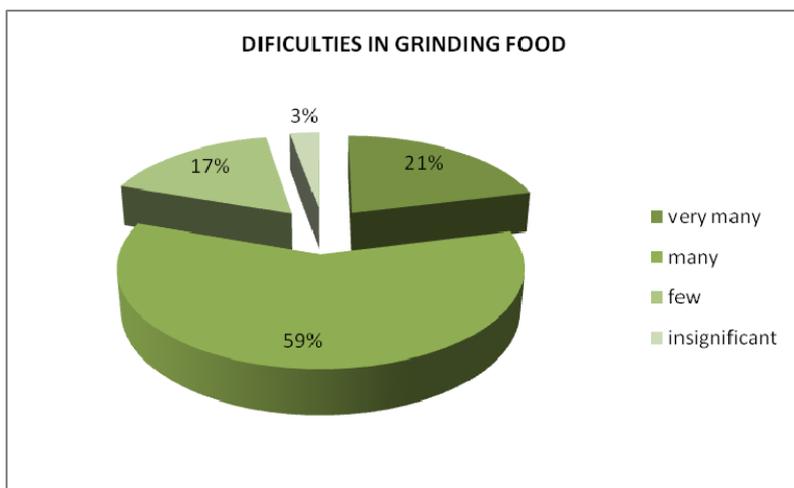
In this study there have been included 71 patients diagnosed with total edentulous, who have registered with the Faculty for Oral Rehabilitation, Oral Health, and the Management of the Dental Cabinet between April 2010 and February 2012. The patients were examined, investigated within the project "PROMOTING ORAL HEALTH THROUGH RAISING THE UNFAVORED POPULATION'S ACCESSIBILITY TO DENTAL SERVICES". Each patient had an observation chart filled out and they filled out and signed an informed consent form for the performance of a medical act as well as a consent form for entering the study. (see attached)

We have included only those patients who were cooperative and who, at the clinical examination presented total edentulous in both jaws which was older than 6 months, without prosthesis. Uncooperative patients have been excluded from the study, as well as patients who have previously worn prosthesis.

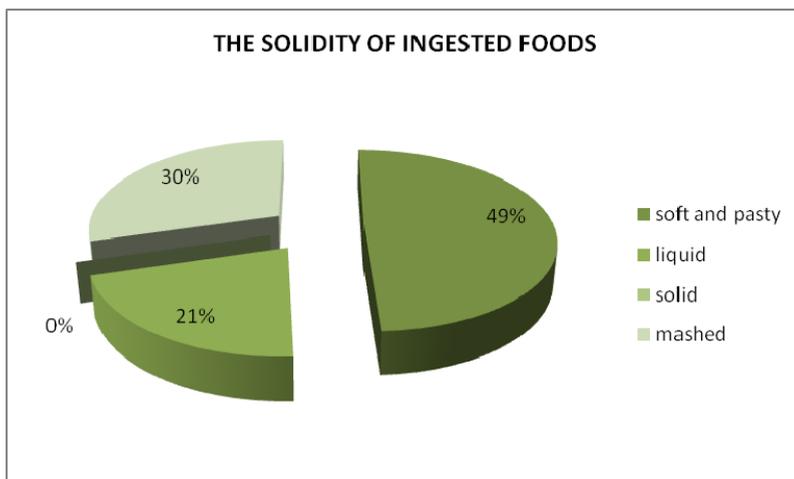
Totally edentulous patients without prosthesis have filled out a questionnaire made up of 23 items. Besides the personal information, the time which has passed from the loss of the last dental units, the questionnaire seeks to capture the patients' perception about masticating, phonatory, physionomical, and psychical disorders induced by the condition of edentulous. All the answers obtained have been written down in a centralized table in order to undergo a statistical analysis. (See attached)

## **4. Results**

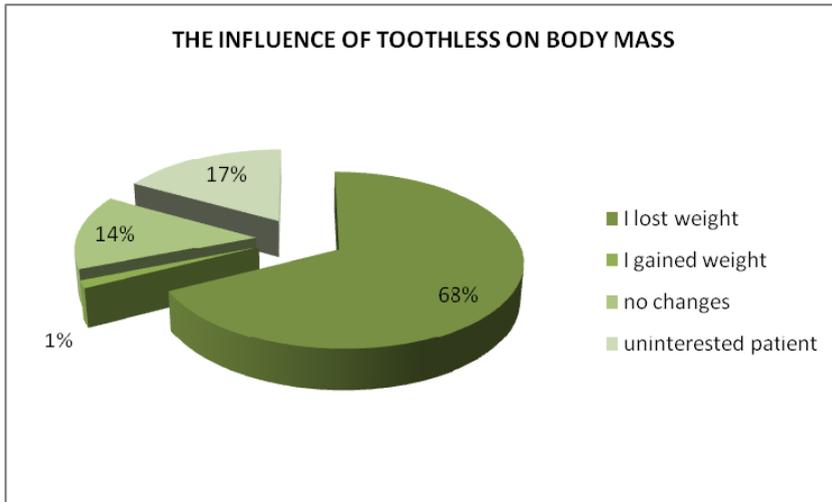
The absence of dental units' causes in most cases an impossible sectioning and grinding of the food. Thus the majority of patients questioned face real difficulties in the act of masticating (15-very many, 42-many). There are also 12 people who do not mention major problems in the act of mastication, and 2 persons assert that they eat properly.



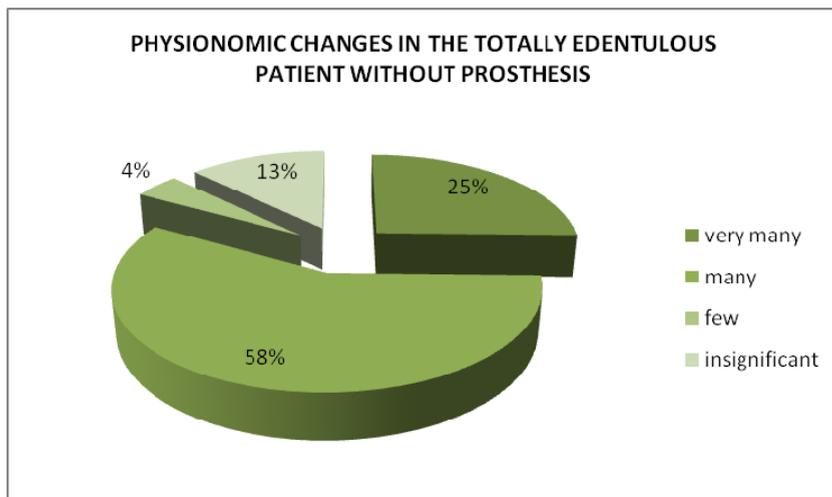
Analyzing the answers to the question concerning the consistency of the foods ingested, one notices that the totally edentulous patients go without solid foods in the act of mastication, "preferring" instead soft, pasty foods (35 cases), mashed food (21 cases).



The majority of patients have lost weight as a consequence of the condition of being edentulous (48 patients). Only one patient asserts that they have gained weight as a consequence of being edentulous, it was probably due to general metabolically causes. There are also patients who assert that they have not paid attention to this aspect or have not followed it.

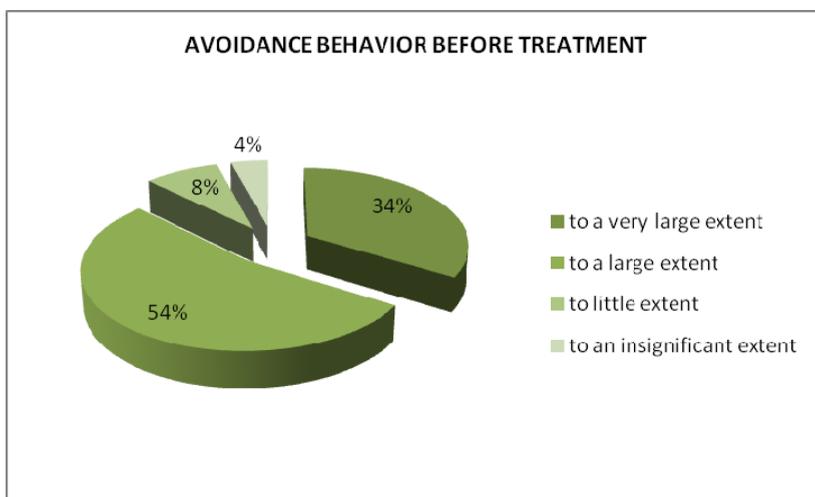


Of the total 71 subjects questioned, 18 perceive to a great extent the unbalance produced at the level of the facial floors, 41 are affected to a great extent by the sudden worsening of the physiognomic aspect. I was negatively surprised to note that there exist patients (9 cases) for whom the physiognomic aspect is not at all important, and 3 other patients are little upset by their own physiognomy.



The loss of dental units has contributed to a great extent to the negative modification of the self image and self esteem. Thus the social life and insertion in the questioned patients' group of friends has been negatively affected very much (15 cases), a lot (35 cases). Also, one's couple life has suffered grave consequences (23 cases), serious consequences (32 cases) due to the edentulous condition.

As a consequence of avoiding these problems raised by the loss of teeth, the patients questioned have developed avoiding behavior to a very large extent (24 cases), respectively a large extent (38 cases).



## 5. Conclusions

The nutritious needs for people aged 50 vary according to their general state of health, their level of physical and intellectual activity, and their degree of individual education. The lack of dental arches makes the incision, crunching, and mastication of the foods impossible. The defective processing of foods will cause traumatic lesions of the mouth cavity mucosa. Consequently, the totally edentulous patient without prosthesis will be obliged to change their diet, using mainly soft, mashed, and liquid foods.

The research stresses the importance of the physiognomy which determines social integration, integration in professional life and the life of the couple; its absence, through the loss of dental units, leads to avoiding behavior on the patients' part. It remains as a challenge for a later study for us to follow up with the appreciation of the quality of life of these patients after receiving the prosthesis.

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