

IMPROVING THE QUALITY OF LIFE OF THE FULL EDENTULOUS PATIENT AFTER APPLICATION OF THE PROSTHESIS

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ABSTRACT. Full edentation is a serious dental condition, because it perturbs all the functions of the stomatognathic system, having consequences on the entire organism. With the entire therapeutic arsenal dental medicine has at its disposal these days, the number of cases of full edentation remains high. Complex oral rehabilitation through the application of prosthetic pieces means regaining oro-dental health, the positive modification of the self image and self esteem, by means of the reintegration of these patients into social life. The main objective sought through the prosthetic rehabilitation by means of total prosthesis was improving the patients' quality of life through reestablishing the deteriorated functions of the dento-maxilar apparatus and the restoration of the aesthetic.

Key words: *fully edentulous, prosthetic rehabilitation, oro-dental health, quality of life.*

ABSTRAKT. Der zahnlose Kiefer ist ein ernsthafter zahnmedizinischer Zustand, da es alle Funktionen des stomatognathen Systems stört, mit Auswirkungen auf den gesamten Körper. Trotz des verfügbaren therapeutischen Arsenal, bleibt die Gesamtzahl des zahnlosen Kieferkammes hartnäckig hoch. Die komplexe orale Rehabilitation, durch Anwendung des Zahnersatzes, bedeutet die Wiedererlangung des Mund- und Zahngesundheitszustandes, wie auch die positive Veränderung des Selbstbildes und des Selbstwertgefühls, durch die gesellschaftliche Wiedereingliederung der Patienten. Das Hauptziel der prothetischen Rehabilitation, mit Hilfe der Totalprothesen, ist die Lebensqualität der Patienten zu verbessern, durch die Wiederherstellung der beschädigten Kieferfunktion und Ästhetik.

Schlüsselworte: *zahnloser Kiefer, prothetische Rehabilitation, Mund- und Zahngesundheitszustand, Lebensqualität*

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Introduction

The challenge launched in the previous article made me determined to follow up on the extent to which the perception of the quality of life has improved in fully edentulous patients after the application of the dental prosthesis. The onset of the edentulous state is a slow, evolving process which perturbs the physiological balance, contributing to the constant aging of the anatomical structures of the entire organism. Masticating, sounding affections, the alteration of the facial expression provoked by the edentulous state become overtly manifest in the case of the edentulous patient, with repercussions on the latter's psyche. [1]

By applying prosthetic pieces, we have aimed to restore the patient's pleasure in the masticating act, by restoring their ability to bite and chew food. Because of missing dental units, these patients have been deprived of the possibility of sectioning food, and the crushing of food has been done mainly with the help of the residual crests. [2] This led to an insufficient mechanical processing and insalivations of the food ball. Many a times, the endobucal examination of these patients has revealed the presence of traumatic lesions of a reversible or irreversible nature. In most cases, the patients have adapted their eating habits to their new condition.

By resorting to selected diets, many patients choose the foods they can ingest and thus deprive their organism of certain food principles. [7] Other authors call attention to the changes which have occurred in the diet. Also, in the specialized literature, there are cases described where totally edentulous patients prefer soft foods, with carbohydrate rich content, which nonetheless lacks fiber. These changes in diet have repercussions over the general health, bearing consequences on the metabolism.

In our practice, we have distinguished interesting situations in which patients have stated that they are not meeting with difficulties in feeding, that they have become used to feeding themselves without dental units, moreover, that they eat anything.

Physiognomic disorders perceived by the totally edentulous patients when they look at themselves in the mirror, or by their entourage, is the main reason for which most of these patients enter a dental medicine office, for oral rehabilitation. There are authors [6] who describe the shrinking of the vertical dimension of the inferior facial floor as corresponding to a "facial collapse".

The teeth, together with the lips, tongue, and palate, have an important role in the conformation of the phonetic channel. The disappearance of the dental elements modifies the position of the lips and tongue, and thus increases the free speaking space. [8] The entourage can no longer perceive correctly the articulation of the lingual and labial phonemes. The voice of such a patient is

unclear, hissing. Initially, the phonetic disorders are evident, then the sounding box of the mouth cavity compensates in some cases for the missing dental elements.

All the disorders mentioned (insufficient mastication, perturbed sounding, affected physiognomy) gradually contribute to the seclusion of the totally edentulous patient from society. There are patients with good capacity to adapt, who easily surpass the difficult post-extraction moments, then get used to the full edentulous state and treat it with sufficient indifference. Another category of patients become aware of the precarious state in which they find themselves and become inhibited, or even suffer, seeking to camouflage their infirmity. The psychic preoccupation with the infirmity generated by the state of full edentation can lead to a functional imbalance which translates into a state of "edentation psychosis". [10]

Work hypothesis. Objectives

Prosthetic oral rehabilitation by means of full prosthesis aims to improve the quality of life of the patients through the restoration of the deteriorated functions of the dento-maxillary apparatus and the restoration of aesthetics.

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

- to analyze the patients' subjective appreciation of the masticating performances after applying the prosthesis,
- to track the extent to which the physiological modifications have corrected themselves after the application of the prosthetic pieces,
- to visualize the way in which the social life of the fully edentulous patient is improved after the application of the prosthetic pieces.

Material and method

71 fully edentulous patients, orally rehabilitated through the application of full prosthesis have been included in the study. The patients have entered into the evidence of the Department of Oral Rehabilitation, Oral Health, and Management of the Dental Office in April 2010-February 2012. The patients have been examined, investigated, and treated within the project "PROMOTING ORAL HEALTH AND INCREASING THE DISADVANTAGED POPULATION'S ACCESS TO DENTAL SERVICES". Every patient had an observation chart drawn up, and has filled out/signed an informed consent form for the performance of a medical act, as well as a consent form for entering a study.

We have included in the study only cooperative patients who have had full prosthesis applied, and the inherent touch ups have been finalized three month ago. Uncooperative patients have been excluded from the study, as well as patients whose period of touch up of the prosthetic pieces has not become finalized.

The fully edentulous patients with prosthesis applied have filled out the same questionnaire as in the precedent study, made up of 23 items. Alongside the personal data, the interval passed from the time of the application of the prosthetic pieces, the questionnaire seeks to reveal whether or not the masticating, sounding, physiognomic, and psychic disorders induced by the edentulous state have improved as a consequence of wearing the prosthetic pieces. All the answered obtained have been included in a centralized table in order to be then subjected to a statistical analysis.

Results. Discussions

The patients who have entered the study are between 40 and 85 years old.

	Mean	Standard deviation	Mode	Minimum	Maximum
Age (years)	60.95	8.288	61.00	40	85

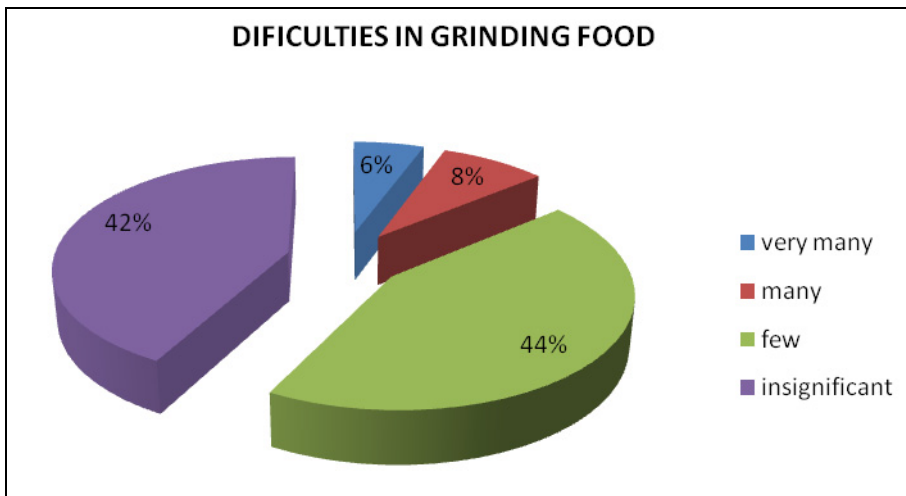


Fig. 1. Difficulties in chewing food

After the application of the prosthesis, through their answers, the questioned patients signal few difficulties (31 cases), or insignificant difficulties (30 cases) in the chewing act. Only 10 persons out of the total of 71 signal difficulties in the quality of the chewing act. This shortcoming is probably due to some unfavorable prosthetic fields, the time lapsed up to the application of the prosthesis, and last but not least to the fact that the majority of these prosthetic pieces have been executed within the process of professional training of our younger colleagues, the students.

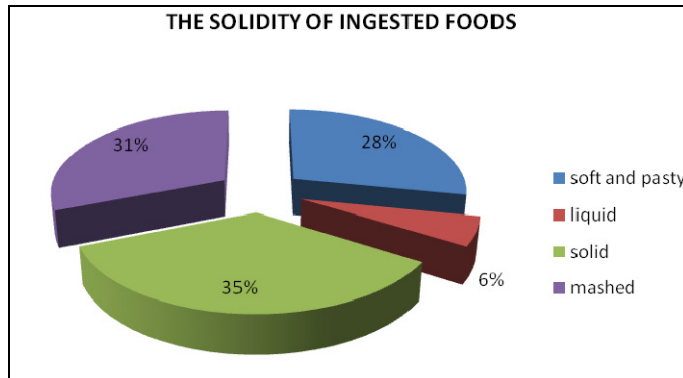


Fig. 2. The consistency of the ingested foods

The consistency of the ingested foods does not differ too much before or after the application of the prosthesis. In both cases, the patients predominantly consume soft, pasty, or ground foods. But, whereas before the application of the prosthesis no patient has signaled the consumption of solid foods, after the application of the prosthetic pieces, there were patients who have stated that certain solid foods have begun to be included in their daily diet. Certainly, beyond the quality of the therapeutic act, in these cases, we are dealing with patients who fully consent and strictly observe all the recommendations made by the doctor.

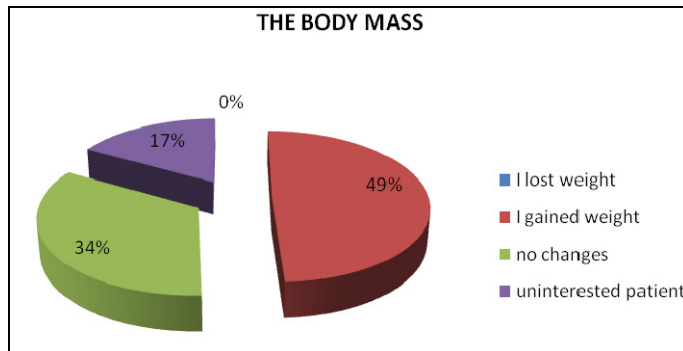


Fig. 3. The influence over the body mass

The patients' answers to this question reveal the fact that 35 patients out of the 71 total have gained weight after the application and after the period of accommodation with the dental prosthesis.

The nutritive needs for the persons aged over 50 vary according to the general state of health, their level of physical and intellectual activity, as well as their degree of individual education.

According to other studies, the calorie consumption (for people 50-65 years old it is 1800-1900 kcal for women and 2000-2300 kcal for men) becomes reduced at 65-75 years to 1300 kcal for women and 1800 kcal for men. For partially or fully edentulous patients, with or without prosthesis, patients who most of the time have an advanced age, the administration of food is closely related to the dental status and the chewing efficiency.

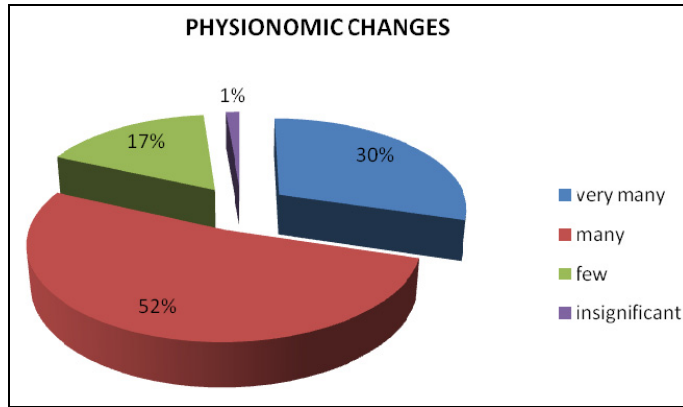


Fig. 4. Physiognomic modifications

The improvement of the physiognomic aspect, after the application of the dental prosthesis, has been perceived to a very large extent (21 respondents), and, respectively, to large extent (37 patients). This goes to show that the classical dental prosthesis, if correctly executed, answer to a great extent to the physiognomic demands.

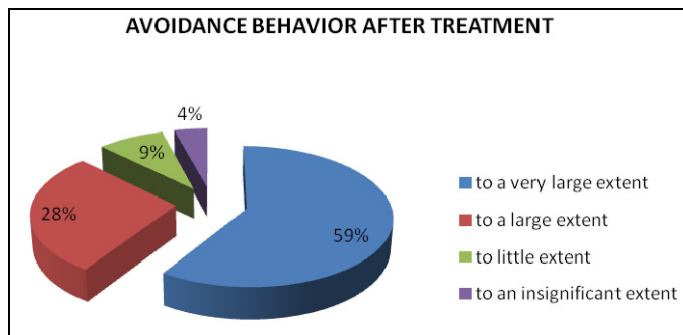


Fig. 5. The psycho-social implications

The substantial physiognomic improvements have contributed to a better integration of the patients in social life, couple's life. Before the application of the prosthesis, and as a consequence of the edentulous state, 50 out of 71 patients

have admitted that their social life was entirely missing, and their integration into the group of friends has suffered. After the application of the prosthesis, an overwhelming proportion of the patients find again the pleasure of actively participating in social life, and the avoiding behaviors developed prior to the application of the prosthesis have disappeared.

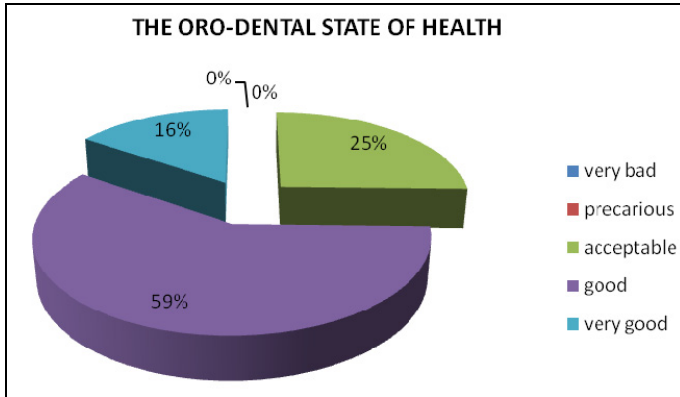


Fig. 6. The oro-dental state of health

The oro-dental state of health has improved, according to the patients questioned, and has considerably improved three months after the application of the dental prosthesis.

If prior to the application of the prosthetic pieces, a large number of patients considered their state of health as being acceptable at best, after the full application of the prosthesis the situation has changed, 11 patients consider their oro-dental state as being very good, 42 perceive their sanogen state as being good, and 18 consider that their state is acceptable.

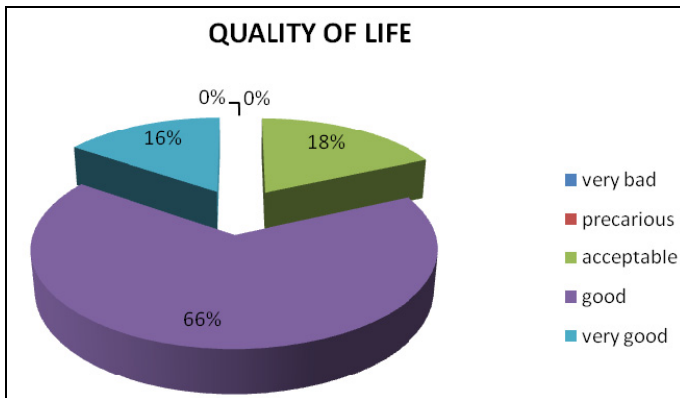


Fig. 7. Quality of life

The quality of life perceived by the patient before and after the application of the prosthesis, also differs very much: 46 of these rate themselves with "insufficient" when it comes to this important parameter. After the application of the prosthesis, 11 patients consider that the quality of their life has become a very good one, 47 say that the quality of their life is a good one, whereas 13 state that it is acceptable.

Certainly, the appreciations being subjective, these are influenced by the education and capacity to understand of each of the patients questioned.

Conclusions. Although the patients treated through dental prosthesis have an advantage in what concerns the chewing act compared to the period prior to the insertion of the prosthetic pieces, a fully edentulous patient with classical dental prosthesis applied will never have the capacity of a dentulous patient.

Classical dental prosthesis, if properly manufactured, answer to a great extent to the physiological demands.

With the help of treatment through dental prosthesis, the totally edentulous patient regains their self-esteem, being able to become reintegrated in social life.

The success of the application of the prosthesis depends on many factors. Beyond the quality of the prosthetic field, of the medical act, of the way in which a doctor treats each individual case, the doctor-patient manner of cooperation, of key importance in the success of the treatment are the patient's personality, their level of culture and intelligence, the psychic state regarding the acceptance of and adaptation to the dental prosthesis.

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