

LIFE QUALITY OF THE ELDERLY WITH IMMEDIATE TOTAL DENTURES

LJ. DŽAMBAS¹, SANJA GNJATO² and Z. VUKIĆ².

¹ Faculty of Medicine, Clinic of Dental Medicine of Vojvodina, 21000 Novi Sad, Serbia

² Faculty of Medicine, Department of Stomatology, 78000 Banjaluka, Bosnia and Herzegovina

Abstract - The quality of life for patients treated with immediate total dentures can be greatly improved, regardless of age. Modern achievements within the fields of medicine and stomatology do not cover the numerous contraindications when it comes to prosthetic recovery as a result of total immediate dentures.

Key words: Immediate total dentures, life quality

INTRODUCTION

An immediate total denture is a total denture implanted where there are still several natural teeth left, whether they are in the lower or upper jaw. Following the production of the immediate total denture in the dental laboratory and clinical testing in the practitioner's office, the denture is applied to the patient immediately after the extraction of the teeth (Krstić et al., 1991; Branovački et al., 1980).

Dental-prosthetic rehabilitation after the application of an immediate total denture aims at maximum function recovery, including the following: articulation, phonetics, masticatory function, aesthetics, as well as the psychological satisfaction of the patient.

Nowadays, in the framework of modern practical medicine and stomatology (along with the use of diagnostic and therapy approaches) many contraindications, both absolute and relative, can be narrowed down to the point where dental prosthetic recovery with an immediate total denture is highly achievable. Certainly, the cooperation of experts and medical specialists (internist-hematologist, internist-endo-

crinologist, and neurologist), an oral surgeon, prosthetics stomatologist, and dental prosthetics technician are an imperative. If this cooperation is good, success is inevitable (Zarb and Bolender, 2003).

Indications for the production of an immediate total denture

- Patients that have undergone prosthetic rehabilitation by laminated acrylic denture
- Patients who retain habitual occlusion, i.e. the interjaw relation is preserved
- Patients suffering from a hematologic syndrome
- Patients suffering from a gastrointestinal illness
- Patients whose teeth residue causes focalosis
- Patients whose teeth are in a terminal stadium of parodontopathy
- Remaining teeth that do not meet the professional and functional demands of the patient

- Remaining teeth do not meet aesthetic criteria

Absolute contraindications

- Elderly patients
- Patients suffering from malignant diseases of the stomatognathic system or some other malignant disease
- Patients with severe forms of undernourishment (cachexia) with poor prospects of recovery
- Patients with psychological imbalances
- Patients clinically proven to be allergic to acryl

With regard to the modern way of life (stress, chronic diseases, and use of various types of drugs), we should also mention the following:

Relative contraindications

- Patients suffering from cardiovascular conditions
- Patients suffering from endocrine conditions
- Patients suffering from a hematologic condition
- Patients suffering from an acute infection illness

There are numerous positive and justifiable reasons for the implantation of an immediate total denture, i.e. when a denture is produced while there are still some teeth remaining in the oral cavity and the denture is placed into the cavity immediately upon the extraction of the existing teeth (Igić and Igić, 1998).

Apart from all the functions mentioned above, such orthodontic dentures have a preventive role since they positively affect food attrition, the gastrointestinal system, acido-peptic activity and gastric secretion (Džambas et al., 1993). A well-made immediate total denture, along with the appropriate psychological preparation of the patient, can signifi-

cantly improve a patient's quality of life. Although the patient will not be able to smile immediately due to the pain and inconvenience, they will feel an inner gratification, which they will be able to share with friends and family shortly after the intervention (Džambas et al., 2005).



Fig. 1 Chronic parodontopathy, terminal stadium of illness



Fig. 2 Teeth condition in the upper jaw

AIMS AND METHODOLOGY

Our aim was to demonstrate how oral-prosthetic rehabilitation in the elderly, using immediate total dentures, can have multiple benefits for the patients and should not be 'exclusively' used for younger patients. The main goal was to bring such intervention closer to patients and thereby make the life quality of the elderly better and safer.

The medical history of 126 patients aged between 65 and 75 and of both gender, was taken, in addition to a clinical examination and their personal practitioner's approval (this is very relevant for chronic pa-

tients and those using a basic condition therapy). In addition, interviews with the patients were held regarding the process of prosthetic rehabilitation with an immediate total denture (Džambas et al., 2002). After obtaining the written approval of a general practitioner or specialist, the immediate total dentures were produced in line with the common protocol, with a few minor deviations (Van Waas et al., 1993; Lavere and Krol, 1973).



Fig. 3 Upper jaw alveolar ridge immediately upon the teeth extraction



Fig. 4. The immediate total denture was implanted right after the teeth were extracted

All 126 patients provided information regarding their physical condition. Some of the questions from the questionnaire were answered before rehabilitation, and the rest were answered once the procedure was completed. The questionnaire mostly referred to the quality of life before and after the immediate total denture was introduced (Džambas et al., 2007).

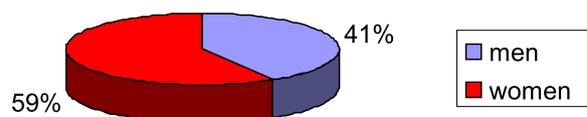
RESULTS

Our research has shown that with persistent use of the dentures, it took the patients around two months to get accustomed to wearing them. Many patients at this age (65 – 75) said they had not expected to get such high-quality dentures that would help them eat, smile and speak normally. They had been initially reluctant to undergo the procedure due to the fact that their dentures were being made while they still had teeth in their mouth.

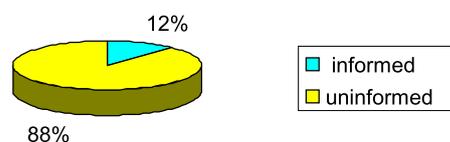
More than 78% of the patients had regular checks with a prosthetic orthodontist. Only a few of them did not follow the instructions on the denture usage and hygiene.

In essence, our approach to the production of immediate total dentures was according to standard procedure. The priority was our patients and their satisfaction was the greatest compliment to our work.

Patients of both gender aged above 65



Patients' information about this type of prosthetic recovery



Reasons for not signing in earlier	Patients No.	Percentage
They thought their age was a limiting factor	98	77%
Waiting for each tooth to be extracted separately	89	70.63%
Fear of extracting all the teeth at once	115	91.26%
Fear of their chronic conditions	76	60.31%
They are using a regular therapy (chronic patients)	82	65.07%

This type of denture made them:	Patients No.	Percentage
Pleased	82	(65.07%)
Partially pleased	19	(15.08%)
Displeased	25	(19.84%)

Coming for denture corrections	Patients No.	Percentage
After 24 hours (regularly)	126	(100%)
Two or three times	82	(65.07%)
More than three times	44	(34.92%)

Patients said that the dentures made them feel	Patients No.	Percentage
More comfortable	89	(70.63%)
Increased their self-esteem	76	(60.31%)
Younger	62	(49.20%)
Safer among other people	75	(59.52%)
More prone to smile	69	(54.76%)
Improved social life (visiting friends)	93	(73.80%)

They lost problems with	Patients No.	Percentage
Chewing	84	(66.66%)
Speech	79	(62.69%)
Digestion	76	(60.31%)
Solitude	68	(53.96%)

Their life quality with immediate total denture has	Patients No.	Percentage
Improved	89	(70.63%)
Partially improved	20	(15.87%)
Not improved	17	(13.49%)

Where and who do you live with	Patients No.	Percentage
Alone in my home	47	(37.30%)
With husband/wife/children	54	(42.85%)
In nursing home	25	(19.84%)

CONCLUSION

When we first chose elderly patients (aged 65 and above) for the application of immediate total dentures, we expected some reluctance on their part as we were usually asked questions such as what type of dentures these were or would they function properly. On the other hand, upon the completion of the recovery process (not immediately, but a few days later) most of our patients, regardless of gender, were evidently happy. Most of them said they would have applied for this procedure earlier if they had known about it. The quality of life of the patients with immediate total dentures greatly improved and they smiled again despite the fact they were in the late 60s and 70s. The most common sentiment expressed was: Thank you for not forgetting about us and bringing a smile to our faces again.

REFERENCES

- Krstić, M., Petrović, A., Stanišić-Sinobad, and D., Z. Stošić (1991) Stomatološka protetika, Totalna zubna proteza. Beograd. *Dečje novine*
- Branovački, D., and B. Sokolović (1980) Totalna proteza. *Naučna knjiga*, Gradina.
- Van Waas, M. A. J., Jonkman, R. E. G., Kalk, W., Van 't Hof, M. A., Plooi, J., and J. H. Van Os (1993) Differences two years after tooth extraction in mandibular bone reduction in patients treated with immediate overdentures or with immediate complete dentures *J. Dent Res* **72** (6), 1001 - 1004.
- Igić, S., and A. Igić (1998) Imedijalna mobilna zubna proteza, Niš., Tibet Niš.
- Lavere, A.M., and A.J. Krol (1973) Immediate denture service. *J Prosthet Den*, **29**, 10-15
- Zarb, G.A., and C.L. Bolender (2004) Prosthodontic treatment for edentulous patients. 12th ed. St. Louis: Mosby
- Džambas Lj., Selaković S., Džambas B., and S. Mirković (2002) Kvalitet života pacijenata saniranih mobilnim protezama. III KONGRES NA STOMATOLOZITE OD MAKE-DONIJA, so međunarodno učestvo. Ohrid, usna prezentacija. Knjiga predavanja.
- Džambas Lj., and S. Selaković (2001) Removable dentures in management of oral cavity and their impact on acidopeptic activity and gastric secretion. 6th Congress of Balkan Stomatological Society. BaSS2001; Romania Bucharest. 371
- Džambas Lj., and S. Čupić (2005) Kvalitet života pacijenata saniranih imedijatnom intraoralnom postresekcionom protezom nakon hirurškog odstranjenja malignih tumora gornje vilice. *Medicina danas*; **4** (3 - 4), 458-462.
- Džambas, Lj., et al. Totalna imedijalna zubna proteza. Narodna i Univerzitetska biblioteka Republike Srpske Banja Luka 2007.

