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Research Article / Araştırma

The effect of different prosthetic treatments on anxiety and quality of life-related to oral health

Farklı protetik tedavilerin anksiyete ve ağız sağlığına bağlı yaşam kalitesi üzerine etkisi

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ABSTRACT

Aim: To investigate anxiety and oral health-related quality of life (OHRQoL) with tooth supported fixed partial denture (TSFPD), implant supported fixed partial denture (ISFPD) and removable partial denture (RPD). **Materials and Methods**: Patients with at least one missing tooth in a posterior region and with the indication of ISFPD (n = 50), TSFPD (n = 50), or RPD (n = 50) were selected for this study. The Control group (CG) had no complaints and any missing teeth. STAI-I (Spielberger's State-Trait Anxiety Inventory-I), STAI-II (Spielberger's State-Trait Anxiety Inventory-II), MDAS (Modified Dental Anxiety Scale) and OHIP-14 (Oral Health Impact Factor) scales were administered to the study group before the treatment and 3 weeks after delivery of the denture. Also the scales were applied to the CG. The data was analyzed by Kruskal Wallis-H, ShapiroWilk's, and Wilcoxon tests (α=0.05). **Results**: The results shown that dental anxiety is low in all prosthetic treatment methods in the study. RPD patients' pre-treatment (mean: 31,8) and post-treatment (mean:28,14) OHRQoL were lower than other groups. There was no significant difference between the pre (mean: 26,7) and post-treatment (mean:24,92) OHRQoL values of the ISFPD patients. However, the lower mean values of OHIP-14 were obtained in the ISFPD group than in the CG (mean ISFPD: 24.92, CG: 26.42) **Conclusions**: All three prosthetic treatments had positive effects on the OHRQoL of the patients. There were not also seen any unfavorable effects of prosthetic treatments on anxiety.

ÖZ

Amaç: Diş destekli sabit bölümlü protez (TSFPD), implant destekli sabit bölümlü protez (ISFPD) ve hareketli parsiyel protez (RPD) ile anksiyete ve ağız sağlığına bağlı yaşam kalitesini (OHRQoL) araştırmak. **Gereç ve Yöntem:** Bu çalışma için arka bölgede en az bir dişi eksik olan ve ISFPD (n=50), TSFPD (n=50) veya RPD (n=50) endikasyonu olan hastalar seçildi. Kontrol grubunda (KG) ise herhangi bir şikayeti ve eksik dişi olmayan hastalar vardır. STAI-I (Spielberger's State- trait Anxiety Inventory -I), STAI-II (Spielberger's State- trait Anxiety Inventory -I), MDAS (Modifiye Dental Anksiyete Skalası) ve OHIP-14 (Oral Health Impact Profile) ölçekleri çalışma grubuna tedaviden önce ve protez teslim edildikten 3 hafta sonra uygulandı. Aynı ölçekler kontrol grubuna da uygulandı. Veriler Shapiro Wilk'in, Kruskal Wallis-H, Post-Hoc Çoklu Karşılaştırma ve Wilcoxon testleri (α=0.05) ile analiz edildi. **Bulgular**: Sonuçlar, çalışmadaki tüm protetik tedavi yöntemlerinde dental kaygının düşük olduğunu göstermiştir. RPD hastalarının tedavi öncesi (Ortalama: 31,8) ve tedavi sonrası (Ortalama: 28,14) ağız sağlığı ile ilgili yaşam kaliteleri diğer tedavi gruplarına göre daha düşüktür. ISFPD hastalarının tedavi öncesi (Ortalama:26,7) ve tedavi sonrası (Ortalama:24,92) OHRQoL değerleri arasında anlamlı fark saptanmamıştır. Ancak ISFPD grubunda OHIP-14 ortalama değerleri kontrol grubu ortalamasına göre daha düşük çıkmıştır (ISFPD: 24.92, Kontrol Grubu: 26.42) **Sonuç**: Her üç protez tedavi seçeneğinin de hastaların OHRQoL'si üzerinde olumlu etkileri olmuştur. Protetik tedavilerin anksiyete üzerine etkisi görülmemiştir.

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Key Words: Situational anxiety, Scale, Prosthetic treatment, OHIP-14, MDAS, OHRQoL

Anahtar Kelimeler: Durumsal Anksiyete, Ölçek, Protetik Tedavi, OHIP-14, MDAS, OHRQoL

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INTRODUCTION

To be healthy is to be good in physical, spiritual, and social terms. Any negativity in these terms affects other factors adversely. Health-related quality of life refers to the individuals' ability to perform their life functions and the physical, social, and mental activities they face with in their lives (1). Oral health is a standard of health of the oral and related tissues which enables a person to speak, eat, socialize without active disease, discomfort, or embarrassment and which contributes to general well-being (2). Patient satisfaction is essential to accept any treatment as successful and the actual value of any treatment can be perceptible when compared to a standard treatment outcome (3,4). Studies involving measurement of health-related quality of life (HRQoL) have become more important in today's health care system as researchers have recognized that the need for scales assess "real life", and measurement methods to accurately reflect the condition of patients (3,4).

Dental anxiety which has been a subject of many investigations, is still accepted as a substantial problem can be defined as fear and anxiety feelings originated

from dental treatment (3,4). Anxiety restricts patients to apply for dental care, which increases the incidence and severity of oral health related discomfort and causes complicated cases that lead to time consuming advanced treatments (3,4). Previous studies pointed out that patients with anxiety have more missing and unhealthy teeth, however fewer dental restorations (5,6,7).

MDAS (Modified Dental Anxiety Scale) and STAI (Spielberger's State- trait Anxiety Inventory) are scales for measurement of anxiety. MDAS is a specially designed questionnaire to measure anticipated fear and dental anxiety. It consists of 5 multiple choices questions ranging from 5 (no anxiety) to 25 (maximum anxiety) (8). 19 points and above shows high anxiety (9,10). STAI measures levels of state and trait anxiety. The Trait Anxiety Inventory (STAI-T/ STAI II) measures how you feel about yourself independently of the situations and conditions in which you live; The STAI-S/ STAI-I (State-Trait Anxiety Inventory) measures the level of anxiety, how a person feels in a particular and specific situation. The score of the STAI test can change from 20 to 80. Higher scores reflect higher levels of anxiety and lower scores reflect lower anxiety (11).

OHIP-14 (Oral Health Impact Profile) is a scale for measurement of OHRQoL (Oral Health-Related Quality of Life). OHIP-14 include the following evaluations: functional disability (questions 1-2), physical pain (questions 3-4), psychological discomfort (questions 5-6), physical disability (questions 7-8), psychological disability (questions 9-10), social disability (questions 11-12), and handicap performing daily activities (questions 13-14) (12). OHIP-14 scoring was assigned to each question, according to the answers: never – 0; rarely – 1; sometimes – 2; frequently – 3; always – 4. The total scores range from 0 to 56. The increase in total value indicates a decrease in OHRQoL (8).

Despite the technological advances in dentistry and preventive practice, the dental anxiety is still known as an important problem. Anxiety restricts patients going to the dentist, which increases the incidence and severity of discomfort. It also makes it difficult to treat such growing problems. The studies, that evaluating the effect of dental anxiety on prosthetic treatments, are limited in literature. Also, studies involving measurement of health-related quality of life have become more important. As researchers have reported that accurate the reflex of patients and the requirement for scales that assess 'real life' in today's health care system.

The present study aimed to investigate anxiety and oral health related quality of life (OHRQoL) with tooth supported fixed partial denture (TSFPD), implant supported fixed partial denture (ISFPD) and removable partial denture (RPD). The null hypothesis of the study was while the OHRQoL score of the ISFPD patients was significantly higher than TSFPD and RPD patients, dental anxiety was also higher due to surgical procedure.

MATERIAL AND METHODS

The present study was approved by the research ethics committee of XXXXXX. All participants were informed about the purpose and procedures of the study, and consent was obtained regarding their voluntary participation. In this study, the effects of different prosthetic treatment alternatives on OHRQoL and anxiety were investigated. STAI-I, STAI-II, MDAS questionnaires were used to evaluate anxiety and OHIP-14 questionnaire was used to evaluate the quality of life. There were 4 groups in this study: 1) TSFPD, 2) ISFPD, 3) RPD 4) CG (Control Group). A total of 200 patients were included in the study, 50 CG, 50 ISFPD, 50 TSFPD, 50 RPD were included in the study.

Participation criteria for participation to the research were: to be older than 18 years, absence of acute dental pain and temporomandibular joint problem, at least having one missing tooth in the posterior region. Additionally, to replace the missing tooth the participants must have a removable partial prosthesis, an implant-supported fixed prosthesis, or a tooth-supported fixed prosthesis indication. Also, before prosthetic treatment began, all necessary treatments such as; root treatment, periodontal treatment, filling and, extraction must be completed. The patients should know how to read and write. There should not be any obstacle situation to seeing and hearing.

The CG consisted of patients who applied to the faculty that have not any missing teeth and prosthetic treatment. They also must be older than 18-years and should know how to read and write. There should be no obstacle to seeing and hearing. Additionally, the average age of the participants in this study was 28.32 for control, 45.46 for TSFPD, 49.45 for ISFPD, and 57.84 for RPD.

STAI-I, STAI-II, MDAS, and OHIP-14 scales were applied before the prosthetic treatment began. The follow-up examinations were applied and the same questionnaires were re-answered by the participants 3 weeks after treatment. The CG participants answered the questionnaires only once at their first visit of the Department of Oral Diagnosis and Radiology.

STATISTICAL ANALYSIS

The data analyzed with SPSS (version 20) program at a significance level of (α=0.05). Because of the number of

units Shapiro Wilk's was used to investigate the normal distribution of the variables. The results were evaluated as, in the case of $p < 0,05$, it is stated that the variables do not come from the normal distribution, whereas in the case of $p > 0,05$, the variables come from the normal distribution. While analyzing the differences between the groups The Kruskal Wallis-H test was used due to the variables did not come from the normal distribution. The significant differences that have seen in the Kruskal Wallis-H test, were analyzed with Post-Hoc Multiple Comparison tests to determine the differences between the groups. The difference between the two dependent variables was analyzed with the Wilcoxon test because the variables did not come from a normal distribution.

RESULTS

The results of STAI I and OHIP 14 scales were revealed that for the TSFPD group STAI-I post-treatment is significantly lower than the pretreatment. However, in the RPD group, the STAI-I pre-treatment value is significantly lower than the post-treatment value (Table 1). Also, based on the OHIP-14 assessment for the TSFPD and RPD groups the post-treatment values are significantly lower than the pre-treatment values. Statistically no significant difference was seen between STAI-II and MDAS for all groups ($p> 0,05$).

The prevalence of OHIP-14 prosthetic treatment in the IDBPP and CG was significantly lower than in the RPD group. On the other hand, evaluation of MDAS, STAI-I, STAI-II scales were not significant (Table 2).

The results of STAI-I and OHIP 14 scales were revealed that for the TSFPD group STAI-I post-treatment is significantly lower than the pretreatment. However, in the RPD group, STAI-I pre-treatment is significantly lower than the post-treatment value (Table 1).

Also, based on the OHIP-14 assessment for TSFPD and RPD groups post-treatment values were significantly lower than pre-treatment values.

Statistically no significant difference was seen between STAI-II and MDAS for all groups ($p> 0,05$).

According to the Kruskal Wallis-H test results; the functional limitation and physical pain of the CG were significantly lower in the pre-treatment group than in the RPD group. However, the handicap pre-treatment value of the ISFPD and CGs was significantly lower than the RPD group (Table 3). Additionally, the functional limitation values after treatment of the ISFPD group is significantly lower than the RPD group. On the other hand, Physical pain and social disability of the ISFPD group is significantly lower than the CG (Table 3).

Evaluation of the post-treatment value for functional limitation in the IDSBP and RPD groups is significantly lower than pre-treatment. Also, in the group of TSFPD, ISFPD, and RPD post-treatment physical pain was significantly lower than pretreatment value (Table 4).

The analysis of the Pre/post-treatment social and psychological disability results of the OHIP-14 revealed statistically significant difference in the RPD group ($p <0.05$). However post-treatment, psychological disability in the RPD group was significantly lower than the pre-treatment value. Also, post-treatment social disability values in the IDSBP and RPD groups were significantly lower than the pre-treatment values. (Table 5)

DISCUSSION

The purpose of this study was to evaluate the effect of different prosthetic treatment options such as TSFPD, ISFPD, RPD to the quality of life and anxiety. The null hypothesis of the study was that while the OHRQoL score of the ISFPD patients would be significantly higher than TSFPD and RPD patients, and dental anxiety would be also higher due to surgical procedure. The null hypothesis of the study that the OHRQoL score of the ISFPD patients would be significantly higher than the TSFPD and RPD patients was rejected. The second part, that the dental anxiety would be higher for the ISFPD group due to surgical procedure was also rejected too.

In the present study the situational, general and dental anxiety of the participants were assessed. STAI scales were preferred because they give both general anxiety and the ability to assess anxiety due to the individual's condition (13). STAI- I was used to assessing anxiety before prosthetic treatment and three weeks after using denture. STAI-II was used to evaluate persistent.

The results of the STAI-I values for the present study demonstrate that low anxiety values are observed before and after all prosthetic treatment options. However, the STAI-I value of the TSFPD group after treatment was lower than the pre-treatment value. (Table 1) Muğlalı et al. had investigated the specific aspects of surgical operation procedures (13). They found that "experiencing pain during surgery" or "oral injury" was not the main cause of anxiety. Instead, patients gave the most anxiety scores before and after surgery, such as "prolonged mouth opening", "fluid accumulation in the mouth", and " voice and vibration of aerator " (13). These results suggest that oral anxiety is not necessarily due to pain expectancy but is related to other experiences that the mouth must keep open for a long time.13 In this study, pre-treatment state anxiety levels of participants with TSFPD were higher than those after treatment. (Table 1) It was assessed that this is caused by the negative expectations of the patient such as the patient's mouth will be open for a long time, fluid will accumulate in his/her mouth.

Table 1. Wilcoxon test results on time-dependent differences of STAI-I and OHIP14 scales in groups

	Pre-treatment (Mean)	Post-treatment (Mean)	(p)
TSFPD STAI- I	36,5	32,36	0,014
ISFPD STAI-I	33,7	31,82	0,095
RPD STAI-I	32,18	34,72	0,012
TSFPD OHIP-14	28,98	24,92	0,003
ISFPD OHIP-14	26,7	24,92	0,159
RPD OHIP-14	31,8	28,14	0,013
TTSFPD STAI-II	46,44	45,22	0,147
ISFPD STAI-II	45,16	44,96	0,506
RPD STAI-II	47,54	47,36	0,652
TTSFPD MDAS	9,32	9,48	0,794
ISFPD MDAS	8,52	8,48	0,947
RPD MDAS	8,94	9,22	0,754

Table 2. (Results of Kruskal Wallis H test for differences between groups in terms of pre-prosthetic values)

		n	Mean	Median	Min	Max	ss	p
STAI 1 Pre-treatment	TSFPD	50	36,5	34	20	58	10,84	0,249
	ISFPD	50	33,7	33	20	60	10,57	
	RPD	50	32,18	31	20	61	9,59	
	Control	50	33,96	31	18	66	12,3	
	Total	200	34,08	32	18	66	10,9	
STAI II Pre-treatment	TSFPD	50	46,44	45	33	62	6,43	0,17
	ISFPD	50	45,16	45	35	56	4,97	
	RPD	50	47,54	47	36	62	5,93	
	Control	50	44,66	45,5	29	63	6,61	
	Total	200	45,95	46	29	63	6,08	
MDAS Pre-treatment	TSFPD	50	9,32	9	5	18	3,64	0,627
	ISFPD	50	8,52	8	5	18	3,12	
	RPD	50	8,94	8	5	22	3,85	
	Control	50	9,84	9	5	30	4,91	
	Total	200	9,16	9	5	30	3,94	
OHIP-14 Pre-treatment	TSFPD	50	27,98	27	14	49	7,78	0,041
	ISFPD	50	26,7	25,5	14	63	9,1	
	RPD	50	31,8	29	15	56	10,15	
	Control	50	26,42	26	16	39	5,88	
	Total	200	28,23	27	14	63	8,59	

Table 3. Kruskal Wallis H test results on the difference between subgroups of the OHIP-14 scale in terms of pre-treatment and post treatment values

	TSFPD Mean	ISFPD Mean	RPD Mean	Control Mean	p
Functional Limitations Pre-treatment	3,20	3,33	4,14	2,53	0,001
Physical Pain Pre-treatment	4,24	3,51	4,8	4,12	0,044
Psychological Discomfort Pre-treatment	5,62	5	5,78	5,69	
Physical Disability Pre-treatment	5,6	5,08	5,1	5,31	0,324
Psychological Disability Pre-treatment	3,28	3,33	4	3,22	0,446
Social Disability Pre-treatment	3	2,84	3,74	2,88	0,325
Handicap Pre-treatment	3,16	2,75	4,04	2,76	0,114
Functional Limitations Post-treatment	2,80	2,45	3,18	2,53	0,042
Physical Pain Post-treatment	3,40	2,78	3,58	4,12	0,003
Psychological Discomfort Post-treatment	5,24	5,41	5,54	5,69	0,609
Physical Disability Post-treatment	5,42	5,43	5,48	5,31	0,891
Psychological Disability Post-treatment	2,98	3,41	3,26	3,22	0,339
Social Disability Post-treatment	2,68	2,47	2,9	2,88	0,041
Handicap Post-treatment	2,96	3,2	3,68	2,76	0,2

Table 4. The Wilcoxon test results on the differences between the groups in terms of functional limitation and physical pain values

	MEAN	P
TSFPD Functional Limitation Pre-treatment	3,2	0,113
TSFPD Functional Limitation Post-treatment	2,8	0,113
ISFPD Functional Limitation Pre-treatment	3,33	**0,002**
ISFPD Functional Limitation Post-treatment	2,45	**0,002**
RPD Functional Limitation Pre-treatment	4,14	**0,009**
RPD Functional Limitation Post-treatment	3,18	**0,009**
TSFPD Physical Pain Pre-treatment	4,24	**0,013**
TSFPD Physical Pain Post-treatment	3,4	**0,013**
ISFPD Physical Pain Pre-treatment	3,51	**0,016**
ISFPD Physical Pain Post-treatment	2,78	**0,016**
RPD Physical Pain Pre-treatment	4,8	**0,003**
RPD Physical Pain Post-treatment	3,58	**0,003**

Table 5. Wilcoxon test results for differences in psychological and social inability scores at different times

	MEAN	p
TSFPD Psycholoical Disability Pretreatment	3,28	0,114
TSFPD Psycholoical Disability Posttreatment	2,98	0,114
ISFPD Psycholoical Disability Pretreatment	3,33	0,908
ISFPDPsycholoical Disability Posttreatment	3,41	0,908
RPD Psycholoical Disability Pretreatment	4	0,025
RPD Psycholoical Disability Posttreatment	2,5	0,025
TSFPD Social Disability Pretreatment	3	0,064
TSFPD Social Disability Posttreatment	2,68	0,064
ISFPD Social Disability Pretreatment	2,84	0,023
ISFPD Social Disability Posttreatment	2,47	0,023
RPD Social Disability Pretreatment	3,74	0,009
RPD Social Disability Posttreatment	2,9	0,009

Statistical analysis presented that the pre-treatment STAI-I value of RPD was less than the post-treatment value. (Table 1) The main reason for this difference was assessed as the pain is the most frequently mentioned factor in the occurrence and continuance of anxiety (13,14,15). After the treatment, the patient's injuries on soft tissues during the adaptation process of dentures cause pain. Although post-treatment questionnaires of STAI-I were filled after the healing of prosthetic irritation, it is thought that the patient's experience in the process of adaptation to the denture affects the results of the questionnaire for the present study.

MDAS was used for dental anxiety measurement because of its ability to be completed shortly and to achieve successful results (16,17). At this scale, score 19 and higher values indicate high anxiety. The anxiety level of the present study was lower than 19 in all groups and there were not seen any significant differences when the results compared before and after treatment. (Table 1) It was assumed that this result is because the patient has gained experience in terms of dental treatment (filling, extraction, root treatment) until reaching the prosthetic phase and that the prosthetic steps are less painful. Dental anxiety also restricts patients from going to the dentist for treatment and they remain unfaithful to their appointments (18,19). This explains the low MDAS values in all prosthetic treatment groups. Studies have shown that the number of missing

and problematic teeth is higher for the patients with anxiety, while the number of restored teeth is less (5,6,7). Also, Thomson et al. had reported that dental anxiety was the highest for the patients who had never been in a visit to a dentist (18,20). Therefore, it is considered that dentist appointments (surgical, periodontal, etc.) before prosthetic treatment may prepare the patient psychologically and the low MDAS values of the present study for all prosthetic treatment options may be due to these previous preparation steps.

There are many studies on the effect of different types of prosthesis on OHRQoL in cases of complete or partial absence of teeth (21,22,23). Functional, psychological, and social conditions, treatment-related distress, and pain can be evaluated in patients who are treated with prosthetic dentistry by using OHRQoL measurements. For this purpose, the OHIP scale, which is the most frequently used one, was chosen in the study. Normally, OHIP is composed of 49 questions which are time-consuming to answer and evaluate (11). The short form of OHIP that consists of 14 questions was used (OHIP-14) in the study to provide higher attendance by participants.

Kende et al. investigated the effects of fixed, removable partial, and total prosthetic treatments on OHRQoL by using an OHIP questionnaire on 63 patients before and after treatment and reported that these treatments reduced the OHIP values of the patients and had a positive effect on OHRQoL (24). John et al. reported the positive effect of prosthetic treatments (total prosthesis, partial removable prosthesis, fixed prosthesis) on patients' OHRQoL for 107 participants (25). In the present study, there were also seen a decrease at the mean values of OHIP-14 (27.98 to 24.92 for TSFPD; 26.9 to 24.92 for ISFPD; 31,8 to 28.14 for RPD) after the prosthetic treatments as seen in the previous studies (Table 1) (24,25,26,27,28,29). All treatment types increased the OHRQoL however the ISFPD and TSFPD were more as the study of Kendi and John et al. The CG group were demonstrated higher values of OHRQoL than ISFPD and TSFPD groups. Although the CG group participants have not any missing teeth, they referred to the clinic with some complaints (pain, aesthetic, bleeding, etc.), and it was thought that these complaints negatively affect the oral quality of life. (13,14)

In this study, when OHIP-14 pre-treatment values were compared between the study groups, the values of the ISFPD and CG were lower than those of RPD patients (Table 2). When pre and post-treatment results are compared; OHIP-14 values after TSFPD and RPD treatment were significantly lower than before (Table1). The number of missing teeth in TSFPD and RPD patients are higher than the other groups. Therefore, the number of missing teeth and advancing age are thought to have adverse effects on OHRQoL. It was assumed that these factors are more effective in increase the OHRQoL of the RPD patients'.

According to the Kruskal Wallis H test the physical pain, functional limitations and social disability results were statistically significant after the post treatment questionnaire of the OHIP-14 (Table 3). With the restoring of missing teeth, the patients's chewing function increased positively and thus the eating function becomes more comfortable with teeth for all treatment groups. Significantly lower levels of social disability of the study groups after treatment may be due to restoring of the teeth deficiencies. Many studies have also shown that the increase in missing teeth results in a decrease in OHRQoL (30,31,32,33,34) Replacement of these deficiencies also contributes to making the patient more comfortable in daily life and the community. Social factors play a larger role in the quality of life of ISFPD patients due to their higher socioeconomic status and their ages. For this reason, the completion of missing teeth increases the social efficiency of patients.

Functional limitation after treatment for ISFPD was found to be lower than RPD (Table 3). This is due to the problems that the patient is experiencing in the pronunciation of words due to the palatal/lingual bar or plaque in the RPDs. Patients with RPD are more likely to have problems while eating, as there is less retention of RPDs when compared to IDSBP.

When physical pain was assessed, post-treatment values of ISFPD group were lower than the CG (Table 3). The major reason may be that the patients in the CG were selected from patients who had not any missed teeth but who applied to our clinic for other reasons such as pain. The only complaint of the ISFPD patients was missing teeth. So, after treatment, this complaint was resolved. Therefore, the physical pain values were better than the CG.

According to MDAS values, no significant change was observed in all three groups after treatment. As a result, dental anxiety was found to be low in patients with prosthetic dental treatment. The effect of prosthetic treatment options on dental anxiety was not determined (Table 2).

One of the limitations of the present study was the non-evaluation of differences according to age, gender and socio-economic status of patients. Also, patients with a deficiency of at least one tooth are included, but a maximum limitation is not determined for the number of missing teeth. It should be taken into consideration that the excess in the number of missing teeth will have a negative effect on OHRQoL.

CONCLUSION

According to the OHIP-14 scale there was no significant difference in OHRQoL among all groups after treatment. In addition, it was observed that all prosthetic treatments improved the quality of life when the correct diagnosis and appropriate prosthetic treatment were selected for the patient. Although it was observed that dental anxiety did not have a negative effect on prosthetic treatment. It was concluded that using these scales at the beginning of the treatment would be more appropriate to reach perfect clinical treatment and so that the clinician could better recognize his/her patient.

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