

Original Research Article

Oral Health Related Quality of Life (OHIP-14) In Patients with Oral Mucosal Diseases Attending to Afzalipour Hospital and Dental School, Kerman, Iran (A Case –Control Study)

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Abstract: Oral mucosal diseases are a diverse group of autoimmune, infectious and inflammatory conditions, that can affect the soft tissues of the mouth. These conditions, can result in considerable morbidity with physical, social, and psychological consequences for patients. Oral mucosal diseases can affect on oral health quality of life. The aim of the present study was to evaluate oral health related quality of life (OHRQoL) of patients with oral mucosal diseases. This cross-sectional study conducted on 41 patients with oral mucosal diseases coming to oral medicine and dermatology department of Kerman Medical University from April to March 2010, and 41 people as control. Data collected through Persian version of (14-item Oral Health Impact Profile, OHIP-14) and demographic data and clinical examination. Data analyzed by SPSS13.5 software using ANOVA, T, CHI² tests. P value considered at 0.05% significant level. Results: In the present study 27(32.9%) were men. The mean age of participants were 33.09±11.4 years. The mean score of OHIP-14 were 11.5±9.7 and 17.3±9.1 in control and patients' groups respectively. Erythema multiforme had the highest impact on OHRQoL followed by denture stomatitis and pemphigus vulgaris. Patients' group had worse OHRQoL with significant differences. There were significant differences between OHRQoL and sex in case and control groups. There was no significant correlation between pain, site and type of oral mucosal diseases and OHRQoL. The results of the present study showed OHRQoL in patients with oral mucosal diseases was significantly worse than controls. Administration of OHRQoL questionnaire provides a detailed picture of impact of oral diseases on patients that may be useful in clinical practice.

Keywords: OHIP-14, oral, mucosal, disease, OHRQoL

INTRODUCTION

Oral health is a part of general health [1]. Oral health related quality of life (OHRQoL) is defined as personal self-assessment about impact of oral health on functional, psychological and social conditions [2]. Importance of oral health with general health and quality of life have been discussed [3]. Oral diseases can develop pain and speech, chewing, aesthetic and swallowing problems [4]. Paradisi *et al* reported significant correlation between pemphigus and quality of life, special in older patients, women and patients with skin mucosal involvement [5]. Tabolli *et al* showed patients with oral mucosal, recurrent aphthous ulceration had the most impact on OHIP-14, followed by lichen

planus and burning mouth syndrome [6]. Lopez-Jornet *et al* showed the worse score of OHIP-14 was in burning mouth syndrome and the best score was in patients with other oral problems [7].

The aim of the present study was assessment of impact of oral mucosal diseases on OHRQoL (OHIP-14) and compared with control group.

METHODS

This case-control study conducted on patients with oral mucosal diseases, who attended to dermatology department of Afzalipour hospital and oral medicine department of dental school, Kerman,

Iran. All patients (41) who attended from March to September 2010 were selected through census sampling method. Control group (41) was selected through healthy individual after matching sex and age. Data were collected through demographic data consist of (sex, age, educational level and job) and oral mucosal information consist of (type of lesion/s, location, pain) from clinical examination and Persian version of Oral Health Impact Profile (OHIP-14).

OHIP-14 questionnaire consists of 14 questions in 7 domains. Scoring of this questionnaire is based on a 5-point Likert scale from zero (never), 1 (rarely), 2 (occasionally), 3 (often), 4 (always), so the rate of number is between 0-56. The higher score means worse oral health quality of life. Inclusion criteria were patients' satisfaction, percentage of oral mucosal disease according to clinical examination by dermatologist or oral medicine specialists. Illiterate patients, patients with acute toothache were excluded. Data analyzed in SPSS 13.5 software by using T, χ^2 and ANOVA tests. *p* value was considered at 0.05% significant level.

RESULTS

The findings of the present study showed 27 (32.9%) were men and 55 (67.1%) were women. The mean age of participants was 33.09±11.4 years. Thirty-one and seventy percents had education higher than licence. 30.48% of participants had government employment. The mean score of OHIP-14 were 17.3±9.1 and 11.5±9.7 in patients and control group respectively. Table 1 shows demographic variables of participants. The most frequent lesions were recurrent aphthous ulceration (54%), followed by lichen planus (18%) and denture stomatitis (18%). The least frequent lesions were erythema multiforme and vascular lesion (2%). Diagram 1 shows the type of lesions in this study. Buccal mucosa was the most frequent site of lesions (31%) followed by alveolar ridge (23%). Patients with Erythema multiforme had the highest score of OHIP-14, followed by denture stomatitis and pemphigus vulgaris (Table 2). There was significant correlation between sex and OHIP-14 score (*p*<0.5). There was no statistical correlation between age, lesions' location and OHIP-14 score. There was also no significant correlation between pain, type of lesions and OHIP-14.

Table 1: Frequency of demographic variables

variable		Number	percent
gender	Men	27	32.92
	women	55	67.07
Educational level	High school	7	8.53
	Diploma	20	28.04
	Higher of diploma	15	19.51
	License	14	18.29
	higher	26	31.70
Job	Government employer	25	30.48
	College students	25	30.48
	Free employer	12	14.63
	Houswives	20	24.39

Table 2: Correlation between mean score of OHIP-14 and variables

Variable		mean	Standard deviation	P value
gender	men	16.88	8.83	S*
	women	18.12	9.59	
pain	yes	18.69	10.62	NS
	no	16.75	8.57	
Lesions' location	Tongue	18.00	7.61	NS
	lips	16.75	9.10	
	Lips and buccal mucosa	19.80	9.14	
	palate	32.00	7.23	
	Oral cavity	19.17	13.46	
	Buccal mucosa	19.00	8.97	
Type of lesions	pemphigus	19.00	-	NS
	Erythema multiform	29.30	7.02	
	Recurrent aphthous ulceration	16.00	9.40	
	Denture stomatitis	28.00	5.60	
	Geographic tongue	9.00	-	
	Burning mouth syndrome	11.50	9.10	
	Fissure tongue	18.30	7.40	
	Vascular lesion	25.00	-	
Groups of participants	case	17.30	9.10	S*
	control	11.50	9.70	

S= significant NS=not significant

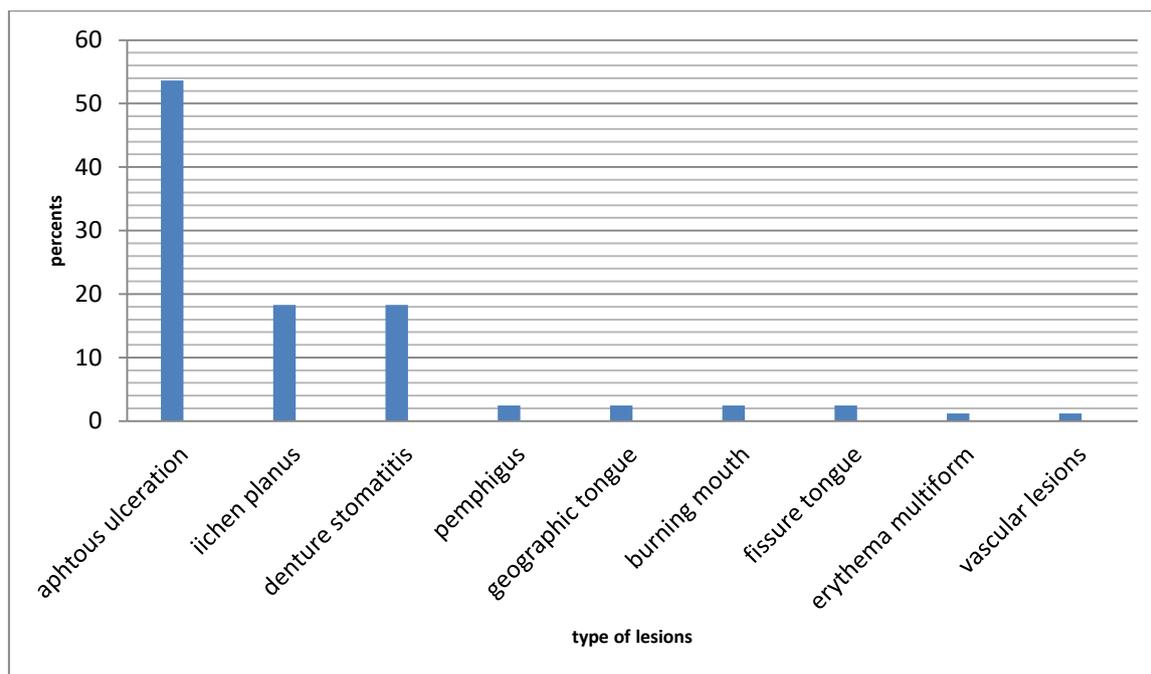


Fig-1: Frequency of oral mucosal lesions

There was significant difference between case and control groups and mean score of OHIP14 ($p=0.0006$). (Table 2).

DISCUSSION

The result of the present study showed recurrent aphtous ulceration was the most frequent lesions.the highest mean score was in erythema multiform.Taboli *et al* [6] showed patients with aphtous ulceration had the greater score of OHRQoL. Caglayan *et al* [8] showed the worst OHRQoL in Turkish patients with oral disorders was in patients with truma.This difference may be due to patients with erythema maliform have ulceration and pain, that suffer and so had worse OHRQoL. Rajan *et al* [9] and Krisdapong *et al* [10] showed patients with oral aphtous and pemphigus had worse quality of life than patients with leukoplakia, lichen planua and other exophytic lesions. In the present study women had worse OHRQoL. This findings is similrs to Tabolli *et al* study. Rajan *et al* [9] also showed women had worse OHRQoL than men.

In our study ther e was not significant correlation between educational level and OHRQOL. It is not similar to Caglayan *et al* [8] study, that reported significant correlation between quality of life and educational level of patients with oral lesions.This difference may be due to difference of study.in our study the range of age of patients is not wide.

We found significant difference between patients with oral mucosal lesions and control group.Patients with oral mucosal lesions had worse OHRQoL. The results is similar to Caglayan *et al* [8], Mumcu *et al* [11], Tabolli *et al* [6] studies ,that showed

oral mucosal lesions have deep impact on OHRQOL. Saimadhavi *et al* [12] showed patents in acute diseases had worse OHIP-14 score .

Lopez-Jornet et al showed the worst score of OHIP-49 was in patients with burning mouth . They also showed burning mouth had deep impact on all domain of OHIP-49 in comparision with control group [13].

Villanueva-Vilchis *et al* [14] showed injured oral mucosa negatively impacts quality of life, specifically functional limitation, physical inability and psychological disabilities could lead to social isolation. Silva *et al* [15] showed bad oral conditions affected quality of life of these patients, especially physical pain and psychological discomfort.

In the present study, there was not statistically significant corelation between pain and OHRQoL.This findings is not similar to Champey *et al* [16]. They showed in patients with primary Sjogren syndrome and xerostomia, pain was associated with quality of life.

There was not significant correlation between job and OHIP-14. It is may be due to small sample size, or may be due to close range of jobs in the present study.

CONCLUSION

Based on the present study oral mucosal diseases affect on OHRQoL.Women with oral mucosal lesions had significantly worse OHRQoL than men .Further resarch on greater sample size is recomanded.

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