

Investigating the relationship between gingivitis disease and *Pemphigus vulgaris* in Razi hospital

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ABSTRACT

One of the frequent protests, especially in the early stages of periodontal disease pemphigus vulgaris lesions to skin protests. (1) Gingivitis Gingivitis is the most common form of periodontal disease. This study aimed to investigate the relationship pemphigus vulgaris is the most common disease of periodontal disease gingivitis as was done in 2011-2012 years. The Historical Cohort study on 40 cases, 40 patients (control group) were performed. The data, viewing, clinical examination, patient interview and a visit to the medical records along with the completed forms were used. Both groups were matched for age, sex, smoking and use of toothbrushing, matched. Clinical examination criteria introduced by (CPITN) Community Periodontal Index and treatment need was carried out in which factors of dental calculus, pocket depth, bleeding on probing were evaluated. SPSS software (version 16) was used to analyze the results. 45% of the control group were diagnosed with periodontal disease, while 77.5% of cases the disease gingivitis. And the difference was statistically significant. The incidence of oral manifestations in pemphigus need to question and search dentists and physicians noticed the symptoms in patients, because finding some oral symptoms in the early stages can be effective in prognosis through early treatment.

KEY WORDS: PEMPHIGUS VULGARIS, PERIODONTAL DISEASE, GINGIVITIS

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INTRODUCTION

One of the frequent protests, especially in the early stages of periodontal disease pemphigus vulgaris lesions to skin protests (Azizi, 2008). Gingivitis is the most common form of periodontal disease. Inflammation confined to the soft tissues surrounding the teeth and dental plaque after plaque accumulation occurred (Shankar *et al.* 2010). Glossy surface, spongy and bleeding on probing the consistency of the clinical signs are conflict free gum and gum adhesive (Esmaili *et al.* 2007). Pemphigus vulgaris (PV) causes blisters and ulcers in the mucosa and skin. The first symptom in 60% of cases appear in the mouth and in 90-80% of cases, the lesions spread over the course of the disease (Manoj Kumar *et al.* 2010).

These lesions sometimes even up to 4 months earlier skin symptoms appear (Akman, 2008). The prevalence of oral lesions of pemphigus vulgaris in various studies, between 90% - 50 have been reported (Yazdanfar, 2010). Except gingivitis is multifactorial disease and systemic disease, one of the these factors are considered (Javali and Zainab, 2012). Also, patients with pemphigus vulgaris in the form of long-term local and systemic steroids or other immunosuppressive drugs that weaken the body's immune response to the pathogen are the factors periodontics (Mitsuhiro *et al.* 2010).

In a study entitled pemphigus limited to the gums which was conducted in 2010 by Mitsuhiro *et al.* patients with a history of gingival lesions was a year old, for his final diagnosis was confirmed pemphigus vulgaris. In this study, it was found pemphigus vulgaris can rarely intact blisters that form on your gums show this may be a delay in diagnosis of underlying disease (Ayoubian, 2008). In another study Manojkumar and colleagues in 2010 a study entitled "Impact of pemphigus vulgaris (PV) periodontal health" performed. This study showed there is no difference in the two groups (PV) and healthy subjects assessed for indicators. But the amount of plaque in the PV group was significantly different than the control group (Javali and Zainab, 2012). Based on the above information gap that existed in this field in Iran, this study aimed to investigate the relationship pemphigus vulgaris is the most common disease of periodontal disease gingivitis as was done in 2011-2012.

MATERIALS AND METHODS

The Historical - cohort of all patients with pemphigus vulgaris the control group eligible for pemphigus vulgaris referred to Razi hospital in 2011-2012 were enrolled after informed consent form filling. Required volume studies were at least 14 in each group. For data collection, observation, clinical examination, the ques-

tion of referring the patient and medical record along with the completed forms and laboratory methods such as immunofluorescence test and biopsy were used.

Clinical examination criteria introduced by (CPITN) Community Periodontal Index and treatment Need was carried out in which the following variables were analyzed: dental calculus, pocket depth, bleeding on probing. These factors should be considered in their teeth were 37, 36, 31, 41, 46, 47, 26, 21, 11, 16, 17. Factors associated with periodontal diseases such as gingivitis free and sticky around the teeth 21, 26, 27, 47, 46, 41, 31, 36, 37, 17, 16, 11 in terms of consistency (consistency), colour, stippling view to verify gingivitis and also the mass rally, bleeding on probing (BOP), pocket depth (PD) were evaluated. The results were scored according to criteria CPITN. According to the table, scoring was done as follows:

1. The absence of any lesion: zero
2. Bleeding on probing mild: score 1
3. Oral offenses: score 2
4. There is less and equal to 5 mm pocket depth: score 3
5. There are bags with a depth of more than 6 mm: grade 4

SPSS software (version 16) was used to analyze the results.

RESULTS

The study included 40 patients with pemphigus vulgaris (PV) and 40 healthy subjects. In addition to the similarity of the two groups in terms of socio - economic (referred to a hospital) were similar in terms of synchronization. The two groups in terms of sex, age, smoking, use of toothbrushing and the lack of any other systemic disease were similar and this difference was not statistically significant. (By taking the P-value = 0.05). (Table 1) 45% of people with periodontal disease are not PV%, 77.5 patients with PV, had periodontal disease. Chi - Square test showed that this difference was statistically significant ($p=0.003$), with mean if people, PV are with the incidence of periodontal disease is almost 2 times more than non-affected individuals.

Table 2. shows Distribution of patients with pemphigus vulgaris and controls and patients with gingivitis attending.

DISCUSSION AND CONCLUSION

In this study, the relationship between pemphigus vulgaris disease and gingivitis in 40 samples and 40 control subjects were studied as a result of 77.5% of patients

Table 1. Distribution of patients with Pemphigus vulgaris and separate controls for confounding factors

Confounding variable Pemphigus	Type		Age	Smoking or other tobacco		Use toothbrushing
	Female	Man		Non-smoking	Smoker	
None (control)	28 person	12 person	2.50	32	2	12 28
Yes(case)	29 person	11 person	1.46	40	—	25 15
Test result	chi-square 0.807		Independent simple t-test 0.647	Fisher exact 0.473		chi-square 0.478

Table 2. Distribution of patients with pemphigus vulgaris and controls the separation of gingivitis disease in patients

Periodontal disease Pemphigus Vulgaris	Bleeding on probing (BOP)	Pocket depth		Dental plaque	Gingivitis
		Less or equal to 5mm	Higher than 6mm		
None (control)	(42%)17	(62%)25	(37%)15	(40%)16	(42%)17
Yes(case)	(80%)32	(27%)11	(72%)29	(70%)28	(82%)33
Test result	chi-square 0.001	chi-square 0.002		chi-square 007.0	chi-square P<0.001

with PV who has symptoms of gingivitis has no significant relationship was found between PV and disease gingivitis. Study Mitsuhiro *et al.*(Esmaili *et al.* 2007), which was conducted in 2010, a year-old man with a history of gingival lesions were examined and the diagnosis was confirmed PV about him and it was concluded that early detection and proper oral lesions initiation of appropriate therapy, can prevent disease cutaneous pro- tests. The study presented a case of pemphigus limited to the gums and thus result we achieved is in line with research in a study by Dr. Ayoubian (Manojkumar *et al.* 2010) in 2008 as pemphigus vulgaris and general- ized aggressive periodontitis were developed and pre- sented a case report of 40 years old woman PV diseases with severe alveolar bone resorption was generalized to the lack of proper oral hygiene with the PV disease was noted in the development of bone destruction. Progres- sive periodontal involvement in this case is also in line with the results. Oral lesions of pemphigus vesicles range from small to large Bula. When Bula tear caused exten- sive injuries. Almost every area of the mouth area may be involved, but multiple lesions often occur in areas of irritation or trauma. In cases of gum, erosive gingivitis clinical diagnosis of oral pemphigus is sometimes as the

only manifestation (Akman *et al.* 2008). However, the incidence of oral manifestations in pemphigus need to question and search dentists and physicians noticed the symptoms in patients, because finding some oral symp- toms in the early stages can be effective in prognosis through early treatment.

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