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THE EFFECT OF ORAL HYGIENE IN PROGNOSIS OF DENTAL PROSTHESIS OF PATIENTS IN PROSTHODONTICS CLINIC

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ABSTRACT

Interventions for better oral hygiene would be more successful if the patient with dental prosthesis knows more about his oral hygiene and how to maintain it.

To assess the association between oral hygiene and its effect in the prognosis of patient with dental prosthesis or any dental restoration.

The sample was composed by 240 cases divided in four provinces (Hadramoot, Aden, Laheeg and Taiz), 60 cases for each province were clinically examined..

KEY WORDS: Oral hygiene, diabetes, dental prosthesis.

INTRODUCTION

The quality of life of a human being is determined among other things by health. Oral health is part of general health. If a person has a poor oral health this may affect his general health [1]

Behavioral interventions can be effectively used to prevent disease, improve management of existing disease, increase quality of life, and reduce healthcare costs [2]

For example the oral hygiene of a patient with dental implant prosthetics must always be extremely efficient [3]Also the presence of removable prostheses can be a factor associated with diseases and discomfort if not maintained adequately, both by dental professionals and wearers themselves[4]. Denture maintenance and hygiene usually show certain degrees of precariousness, however. One of the most frequent problems found is poor denture hygiene [5,6], often caused by lack of instruction or age-related motor coordination problems [7]. The acquisition of better oral hygiene habits by complete denture wearers improves oral health and also increases dentures' longevity. Nevertheless, changing edentulous patients' oral hygiene habits is usually a difficult task[8,9] Adequate cleansing habits render biofilm formation difficult, in analogy to what happens on the natural dentition[10].

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Much systemic disease can affect the oral hygiene and there is a strong relationship between periodontal disease and diabetes in which Periodontitis has been referred to as the sixth complication of diabetes.(11)

The people with diabetes had significantly more clinical attachment loss than controls. In another cross-sectional study, Bridges and others found that diabetes affected all periodontal parameters (12).

Oral health is an important component of overall health, well-being, and quality of life for institutionalized elders. Despite reports by dentists of the importance of oral hygiene, empirical evidence shows that daily oral care interventions have not been effective in safeguarding the oral and general health of this vulnerable population. Effective practice must involve not only recognizing its importance but also ensuring that daily oral hygiene receives the same priority as other care practices.(13)

So Taking care of your teeth can prevent expensive dental procedures in the future. And while regular dental visits do play an important role in overall care, small at-home remedies can help you get that million-dollar smile. Dr ShantanuJaradi offers a few tips... - Drink plenty of water. It is a natural mouthwash that can help reduce stains left by coffee, soda and ensure that you include a lot of fruits and vegetables in your diet. (14)

General objectives:

The objective of this study was to investigate and describe the effect of oral hygiene in prognosis of dental prosthesis of patients prosthodontics clinic 2012-2013.

Specific objectives:

- To distribute of patient according to gender, oral hygiene and periodontal disease.
- To distribute of patients according to losing of posterior teeth residency and systemic disease.
- To distribute of patients according to losing of posterior teeth and bad habits.
- To distribute of periodontal pocket (disease) among the patient.
- To distribute of patient according to gender, residency and the number of tooth brushing.
- To distribute of patient according to the frequency of gender and tooth brushing.

MATERIALS AND METHODS

- This research was done in faculty of dentistry of Aden university in prosthodontics department from 2013-2014. 240 cases (Hadhramoot, Aden, Laheeg and Taiz)- 60 cases for each province -were analyzed and divided into six groups: gender and oral hygiene, losing of posterior teeth residency and systemic disease, losing of posterior teeth and bad habits, periodontal pocket (disease) among the patient, number of tooth brushing and the frequency of gender tooth brushing in each provinces and frequency of gender and tooth brushing in general.
- Each patient complete a medical and dental history and signed an informed consent document. All patients accept oral examinations and each patient answer the case sheet applied in clinical examination.
- The chi-squared test was used to analyze the differences between the frequencies of in groups. group or subgroup were considered significantly different from each other if <0.05. All statically calculations were performed using the program SPSS 11.5 for windows.

RESULTS

Distribution of patient according gender, oral hygieneand periodontal disease in:

TABLE (1) Hadhramoot

Periodontal disease?				Oral hygiene		Total
				Good hygiene	Bad hygiene	
Yes	Gender	Male	Count	6	9	15
			% of Total	26.1%	39.1%	65.2%
		Female	Count	7	1	8
			% of Total	30.4%	4.3%	34.8%
		Total	Count	13	10	23
			% of Total	56.5%	43.5%	100.0%
Yes	Gender	Male	Count	8	13	21
			% of Total	21.6%	35.1%	56.8%
		Female	Count	15	1	16
			% of Total	40.5%	2.7%	43.2%
		Total	Count	23	14	37
			% of Total	62.2%	37.8%	100.0%

In table (1): Patients with periodontal disease: In males: 26.1% with good oral hygiene and 39.1%with bad oral hygiene. In Females: 30.4% with good oral hygiene and 4.3% with bad oral hygiene.

TABLE (2) Taiz

Periodontal disease?				Oral hygiene		Total
				Good hygiene	Bad hygiene	
Yes	Gender	Male	Count	3	14	17
			% of Total	8.8%	41.2%	50.0%
		Female	Count	3	14	17
			% of Total	8.8%	41.2%	50.0%
	Total		Count	6	28	34
			% of Total	17.6%	82.4%	100.0%
Yes	Gender	Male	Count	6	4	10
			% of Total	23.1%	15.4%	38.5%
		Female	Count	10	6	16
			% of Total	38.5%	23.1%	61.5%
		Total	Count	16	10	26
			% of Total	61.5%	38.5%	100.0%

In table (2): Patients with periodontal disease: In males:8.8% with good oral hygiene and 41.2% with bad oral hygiene. In females:8.8% with good oral hygiene and 41.2% with bad oral hygiene.

TABLE (3) Laheeg

Periodontal disease?				Oral hygiene		Total
				Good hygiene	Bad hygiene	
Yes	Gender	Male	Count	7	8	15
			% of Total	25.9%	29.6%	55.6%
		Female	Count	7	5	12
			% of Total	25.9%	18.5%	44.4%
		Total	Count	14	13	27
			% of Total	51.9%	48.1%	100.0%
Yes	Gender	Male	Count	9	6	15
			% of Total	27.3%	18.2%	45.5%
		Female	Count	13	5	18
			% of Total	39.4%	15.2%	54.5%
		Total	Count	22	11	33
			% of Total	66.7%	33.3%	100.0%

In table(3): Patients with periodontal disease: In males: 25.9% with good oral hygiene and 29.6 %with bad oral hygiene. In females: 25.9%with good oral hygiene and 18.5% with bad oral hygiene.

TABLE (4) Aden

Periodontal disease?				Oral hygiene		Total
				Good hygiene	Bad hygiene	
Yes	Gender	Male	Count	4	14	18
			% of Total	13.8%	48.3%	62.1%
		Female	Count	5	6	11
			% of Total	17.2%	20.7%	37.9%
		Total	Count	9	20	29
			% of Total	31.0%	69.0%	100.0%
Yes	Gender	Male	Count	11	10	21
			% of Total	35.5%	32.3%	67.7%
		Female	Count	6	4	10
			% of Total	19.4%	12.9%	32.3%
		Total	Count	17	14	31
			% of Total	54.8%	45.2%	100.0%

In table (4): Patients with periodontal disease: Im males: 13.8% with good oral hygiene and 48.3% with bad oral hygiene. In females: 17.2% with good oral hygiene and 20.7 with bad oral hygiene.

TABLE (5) Comparison between the provinces according to the residency, oral hygiene and periodontal disease:

Periodontal disease?				Oral hygiene		Total
				Good hygiene	Bad hygiene	
Yes	Residency	Hadramoot	Count	13	10	23
			% of Total	11.5%	8.8%	20.4%
		Aden	Count	9	20	29
			% of Total	8.0%	17.7%	25.7%
		Taiz	Count	6	28	34
			% of Total	5.3%	24.8%	30.1%
		Laheeg	Count	14	13	27
			% of Total	12.4%	11.5%	23.9%
		Total	Count	42	71	113
			% of Total	37.2%	62.8%	100.0%
Yes	Residency	Hadramoot	Count	23	14	37
			% of Total	18.1%	11.0%	29.1%
		Aden	Count	17	14	31
			% of Total	13.4%	11.0%	24.4%
		Taiz	Count	16	10	26
			% of Total	12.6%	7.9%	20.5%
		Laheeg	Count	22	11	33
			% of Total	17.3%	8.7%	26.0%
		Total	Count	78	49	127
			% of Total	61.4%	38.6%	100.0%

TABLE (6) Comparison between the provinces according to residency ,oral hygiene and gender

Gender				Oral hygiene		Total
				Good hygiene	Bad hygiene	
Male	Residency	Hadramoot	Count	14	22	36
			% of Total	10.6%	16.7%	27.3%
		Aden	Count	15	24	39
			% of Total	11.4%	18.2%	29.5%
		Taiz	Count	9	18	27
			% of Total	6.8%	13.6%	20.5%
		Laheeg	Count	16	14	30
			% of Total	12.1%	10.6%	22.7%
		Total	Count	54	78	132
			% of Total	40.9%	59.1%	100.0%
Female	Residency	Hadramoot	Count	22	2	24
			% of Total	20.4%	1.9%	22.2%
		Aden	Count	11	10	21
			% of Total	10.2%	9.3%	19.4%
		Taiz	Count	13	20	33
			% of Total	12.0%	18.5%	30.6%
		Laheeg	Count	20	10	30
			% of Total	18.5%	9.3%	27.8%
		Total	Count	66	42	108
			% of Total	61.1%	38.9%	100.0%

Distribution of patients according losing of posterior teeth residency and systemic disease:

TABLE (7) Hadhramoot:

Any associated systemic diseases?			losing posterior teeth?		Total
			yes	no	
	normal	Count	28	28	56
		% of Total	46.7%	46.7%	93.3%
	cardiovascular disease	Count	0	1	1
		% of Total	.0%	1.7%	1.7%
	respiratory disease	Count	0	1	1
		% of Total	.0%	1.7%	1.7%
	endocrine (diabetes) and cardiovascular disease	Count	1	0	1
		% of Total	1.7%	.0%	1.7%
	ENT disease	Count	1	0	1
		% of Total	1.7%	.0%	1.7%
	Total	Count	30	30	60
		% of Total	50.0%	50.0%	100.0%

From 60 case only 1 case lost posterior teeth with diabetes and 1 case with ENT.

46.7% of patients lost their teeth without association of systemic diseases and 3.3% with systemic diseases.

TABLE (8) Taiz

Any associated systemic diseases?			losing posterior teeth?		Total
			yes	no	
	normal				
		% of Total	10.0%	41.7%	51.7%
	endocrine (diabetes) disease				
		% of Total	20.0%	.0%	20.0%
	cardiovascular disease				
		% of Total	8.3%	6.7%	15.0%
	renal disease				
		% of Total	.0%	1.7%	1.7%
	endocrine (diabetes) and cardiovascular disease				
		% of Total	5.0%	1.7%	6.7%
	renal and cardiovascular disease	Count	1	0	1
		% of Total	1.7%	.0%	1.7%
	renal and endocrine(diabetes) disease	Count	2	0	2
		% of Total	3.3%	.0%	3.3%
	Total	Count	29	31	60
		% of Total	48.3%	51.7%	100.0%

10% of patients lost their teeth without association of systemic diseases and 38.3% with systemic diseases.

TABLE (9) Laheeg

Any associated systemic diseases?			losing posterior teeth?		Total
			yes	no	
	normal	Count	32	10	42
		% of Total	53.3%	16.7%	70.0%
	endocrine (diabetes) disease	Count	7	1	8
		% of Total	11.7%	1.7%	13.3%
	cardiovascular disease	Count	7	2	9
		% of Total	11.7%	3.3%	15.0%
	endocrine (diabetes) and cardiovascular disease	Count	1	0	1
		% of Total	1.7%	.0%	1.7%
	Total	Count	47	13	60
		% of Total	78.3%	21.7%	100.0%

In Table (9): 53.3% of patients lost their teeth without association of systemic diseases and 26% with systemic diseases.

TABLE (10) Aden

Any associated systemic diseases?			Losing posterior teeth?		Total
			yes	no	
	normal	Count	26	15	41
		% of Total	43.3%	25.0%	68.3%
	endocrine (diabetes) disease	Count	1	0	1
		% of Total	1.7%	.0%	1.7%
	cardiovascular disease	Count	3	2	5
		% of Total	5.0%	3.3%	8.3%
	respiratory disease	Count	1	1	2
		% of Total	1.7%	1.7%	3.3%
	renal disease	Count	1	0	1
		% of Total	1.7%	.0%	1.7%
	respiratory and cardiovascular disease	Count	2	1	3
		% of Total	3.3%	1.7%	5.0%
	endocrine (diabetes) and cardiovascular disease	Count	1	0	1
		% of Total	1.7%	.0%	1.7%
	epilepsy,endocrine(diabetes) and cardiovascular disease	Count	1	0	1
		% of Total	1.7%	.0%	1.7%
	dermatological disease	Count	1	0	1
		% of Total	1.7%	.0%	1.7%
	blood disease	Count	2	0	2
		% of Total	3.3%	.0%	3.3%
	gastrointestinal disease	Count	1	1	2
		% of Total	1.7%	1.7%	3.3%
	Total	Count	40	20	60
		% of Total	66.7%	33.3%	100.0%

In Table (10) 43.3% of patients lost their teeth without association of systemic diseases and 23.4% with systemic diseases.

TABLE (11) Comparison between all provinces and residency in one table

Losing posterior teeth?			residency				Total
			Hadramoot	Aden	Taiz	Laheeg	
yes	Any associated systemic diseases?	normal	19.2%	17.8%	4.1%	21.9%	63.0%
		endocrine (diabetes) disease		.7%	8.2%	4.8%	13.7%
		cardiovascular disease		2.1%	3.4%	4.8%	10.3%
		respiratory disease		.7%			.7%
		renal disease		.7%			.7%
		respiratory and cardiovascular disease		1.4%			1.4%
		endocrine (diabetes) and cardiovascular disease	.7%	.7%	2.1%	.7%	4.1%
		epilepsy,endocrine(diabetes) and cardiovascular disease		.7%			.7%
		dermatological disease		.7%			.7%
		ENT disease	.7%				.7%
		renal and cardiovascular disease			.7%		.7%
		renal and endocrine(diabetes) disease			1.4%		1.4%
		blood disease		1.4%			1.4%
		gastrointestinal disease		.7%			.7%
	Total		20.5%	27.4%	19.9%	32.2%	100.0%
no	Any associated systemic diseases?	normal	29.8%	16.0%	26.6%	10.6%	83.0%
		endocrine (diabetes) disease				1.1%	1.1%
		cardiovascular disease	1.1%	2.1%	4.3%	2.1%	9.6%
		respiratory disease	1.1%	1.1%			2.1%
		renal disease			1.1%		1.1%
		respiratory and cardiovascular disease		1.1%			1.1%
		endocrine (diabetes) and cardiovascular disease			1.1%		1.1%
		gastrointestinal disease		1.1%			1.1%
	Total		31.9%	21.3%	33.0%	13.8%	100.0%

In Table (11); the total percentage of endocrine (diabetes) disease alone (13.7 %) and with associated with other diseases is 19.9 %. Percentage of Cardiovascular disease alone (10.3 %) and with association with other diseases is 16.5 %.

Distribution of patients according losing of posterior teeth and bad habits:

TABLE (12) Hadramoot

			losing posterior teeth?		Total
			yes	no	
any bad habits?	No	Count	21	20	41
		% of Total	35.0%	33.3%	68.3%
	qat chewing	Count	3	3	6
		% of Total	5.0%	5.0%	10.0%
	Smoking	Count	0	2	2
		% of Total	.0%	3.3%	3.3%
	tobacco chewing	Count	3	1	4
		% of Total	5.0%	1.7%	6.7%
	smoking and qat chewing	Count	3	3	6
		% of Total	5.0%	5.0%	10.0%
	gat and tobacco chewing	Count	0	1	1
		% of Total	.0%	1.7%	1.7%
Total		Count	30	30	60
		% of Total	50.0%	50.0%	100.0%

In Table (12):15 % of posterior teeth are lost due to bad habits Qat chewing is the most common cause of tooth loss.

TABLE (13) Taiz

			losing posterior teeth?		Total
			yes	no	
Any bad habits?	No	Count	8	16	24
		% of Total	13.3%	26.7%	40.0%
	qat chewing	Count	12	8	20
		% of Total	20.0%	13.3%	33.3%
	smoking	Count	3	1	4
		% of Total	5.0%	1.7%	6.7%
	smoking and qat chewing	Count	2	2	4
		% of Total	3.3%	3.3%	6.7%
	Shmma	Count	1	0	1
		% of Total	1.7%	.0%	1.7%
	Shisha	Count	3	1	4
		% of Total	5.0%	1.7%	6.7%
	shesha and qat chewing	Count	0	1	1
		% of Total	.0%	1.7%	1.7%
	nail bitting	Count	0	2	2
		% of Total	.0%	3.3%	3.3%
Total		Count	29	31	60
		% of Total	48.3%	51.7%	100.0%

In Table (13): 37 % of posterior teeth are lost due to bad habits.Qat chewing is the most common cause of tooth loss.

TABLE (14) Laheeg:

			losing posterior teeth?		Total
			yes	no	
Any bad habits?	no	Count	22	8	30
		% of Total	36.7%	13.3%	50.0%
	qat chewing	Count	14	2	16
		% of Total	23.3%	3.3%	26.7%
	tobacco chewing	Count	3	0	3
		% of Total	5.0%	.0%	5.0%
	smoking and qat chewing	Count	6	2	8
		% of Total	10.0%	3.3%	13.3%
	gat and tobacco chewing	Count	0	1	1
		% of Total	.0%	1.7%	1.7%
	bruxism	Count	1	0	1
		% of Total	1.7%	.0%	1.7%
	qat cewing, smoking,stress and bruxism	Count	1	0	1
		% of Total	1.7%	.0%	1.7%
Total		Count	47	13	60
		% of Total	78.3%	21.7%	100.0%

In Table (14): 41.6 % of posterior teeth are lost by bad habits.Qat chewing is the most common cause of tooth loss.

TABLE (15) Aden

			losing posterior teeth?		Total
			yes	no	
any bad habits?	No	Count	25	14	39
		% of Total	41.7%	23.3%	65.0%
	qat chewing	Count	6	3	9
		% of Total	10.0%	5.0%	15.0%
	Smoking	Count	1	0	1
		% of Total	1.7%	.0%	1.7%
	smoking and qat chewing	Count	7	1	8
		% of Total	11.7%	1.7%	13.3%
	nail bitting	Count	1	0	1
		% of Total	1.7%	.0%	1.7%
	smoking and shmma	Count	0	1	1
		% of Total	.0%	1.7%	1.7%
	snuff dipping	Count	0	1	1
		% of Total	.0%	1.7%	1.7%
Total		Count	40	20	60
		% of Total	66.7%	33.3%	100.0%

In Table (15): 26 % of posterior teeth are lost by bad habits.Qat chewing is the most common cause of tooth loss.

TABLE (16) Distribution of periodontal pocket (disease) among residency of patient

			residency				Total
			Hadramoot	Aden	Taiz	Laheeg	
periodontal pocket?	Yes	Count	23	29	34	27	113
		% of Total	9.6%	12.1%	14.2%	11.3%	47.1%
	No	Count	37	31	26	33	127
		% of Total	15.4%	12.9%	10.8%	13.8%	52.9%
Total		Count	60	60	60	60	240
		% of Total	25.0%	25.0%	25.0%	25.0%	100.0%

In table (16) - 47.1% of cases have periodontal disease.14.2% in Taiz.12.1 % in Aden while 11.3 % in Laheeg and 9.6 % in Hadramoot.

TABLE (17) Distribution of patient according to gender, residency and the number of tooth brushing:

Residency				tooth brushing?					Total
				once/day	twice/day	three times/day	never	Sometimes (irregular)	
Hadramoot	gender	male	Count	14	8	2	7	5	36
			% of Total	23.3%	13.3%	3.3%	11.7%	8.3%	60.0%
		female	Count	7	10	4	3	0	24
			% of Total	11.7%	16.7%	6.7%	5.0%	.0%	40.0%
Total			Count	21	18	6	10	5	60
			% of Total	35.0%	30.0%	10.0%	16.7%	8.3%	100.0%
Aden	gender	male	Count	6	5	1	25	2	39
			% of Total	10.0%	8.3%	1.7%	41.7%	3.3%	65.0%
		female	Count	6	3	0	10	2	21
			% of Total	10.0%	5.0%	.0%	16.7%	3.3%	35.0%
Total			Count	12	8	1	35	4	60
			% of Total	20.0%	13.3%	1.7%	58.3%	6.7%	100.0%
Taiz	gender	male	Count	7	6		10	4	27
			% of Total	11.7%	10.0%		16.7%	6.7%	45.0%
		female	Count	9	6		16	2	33
			% of Total	15.0%	10.0%		26.7%	3.3%	55.0%
Total			Count	16	12		26	6	60
			% of Total	26.7%	20.0%		43.3%	10.0%	100.0%
Laheeg	gender	male	Count	12	8	1	6	3	30
			% of Total	20.0%	13.3%	1.7%	10.0%	5.0%	50.0%
		female	Count	12	10	1	7	0	30
			% of Total	20.0%	16.7%	1.7%	11.7%	.0%	50.0%
Total			Count	24	18	2	13	3	60
			% of Total	40.0%	30.0%	3.3%	21.7%	5.0%	100.0%

In table (17)

Hadramoot: The highest percentage of patients brushing their teeth once/day with 35 % (males 23.3% and females 11.7%).

Aden: The highest percentage of patients never brushing their teeth with 58.3% (males 41.7 % and females 16.7%).

Taiz: The highest percentage of patients never brushing their teeth with 43.3 % (males 16.7 % and females 26.7 %).

Laheeg: The highest percentage of patients brushing their teeth once/day with 40% (males 20% and females 20%).

TABLE (18) Distribution of patient according to the frequency of gender tooth brushing

			tooth brushing?					Total
			once/day	twice/day	three times/day	never	sometimes (irregular)	
Gender	male	Count	39	27	4	48	14	132
		% of Total	16.3%	11.3%	1.7%	20.0%	5.8%	55.0%
	female	Count	34	29	5	36	4	108
		% of Total	14.2%	12.1%	2.1%	15.0%	1.7%	45.0%
Total		Count	73	56	9	84	18	240
		% of Total	30.4%	23.3%	3.8%	35.0%	7.5%	100.0%

In table (18):

35% never brushing their teeth (males 20% and females 15 %).

30 % brushing their teeth once/day (males 16.3% and females 14.2%).

23.3 % brushing their teeth twice/day (males 11.3 % and females 12.1%).

DISCUSSION

There is a great relationship between the maintaining good oral hygiene and having a good and strong periodontal structure while the opposite is true, most people with bad habits as Qat chewing or those who never brushing their teeth (etc.) all these will lead to destruction of periodontum and eventually loss of teeth.

According to the World Health Organization (WHO) criteria, by the age of 34, teeth are usually extracted for caries, and later it is extracted because of periodontal disease[15] Periodontal disease is a major cause of teeth loss and its incidence rises among old age people. This disease affects the supporting structure of the teeth, which includes primarily the alveolar bone. As the alveolar bone resorbs, the teeth becomes mobile and without proper intervention, and will eventually be lost.[16,17]

In our serach most of cases with bad oral hygiene in association with periodontal disease occur in males than in females.

The highest percentage for males occurs in Aden with (48.3 %) and the highest percentage for females occurs in Taiz with (41.2 %) while the lowest percentage for males occurs in Laheeg with (29.6%) while in females the lowest percentage occurs in Hadhramoot with (4.3%).

There is an association between the systemic diseases and there effect in the general and oral health, this effect may reflect in the defense mechanism of the body and the oral system.

The most common disease affect the oral system is diabetes but it is concluded that inadequate metabolic control, dental calculus and longstanding diabetes can increase the risk of periodontitis as well as teeth loss. On the other hand, diabetics, who regularly control their disease and oral health through self-care and regular dental and oral professional care, have a lower risk of teeth loss. [15]

in our research the highest percentage of systemic diseases associated with the loss of teeth is diabetes disease with a percentage 19.9 % of all systemic diseases then cardiovascular diseases with a percentage of 16.5 %. This results is agree with results of other researches made in the world for example, in a study made in Aden university/ republic of Yemen ,in the faculty of dentistry in the period between 2009-2010 in which diabetes has the greatest percentage in association of periodontal disease with (28 %) of all systemic disease. Another study in Canada suggested that by the year 2010, it is expected that 3 million Canadians will be afflicted with diabetes mellitus.[15] It has been reported that for every person known to have diabetes, there is someone else in whom the disease remains undiagnosed.[15].

In all provinces, Qat chewing is the most common cause of posterior teeth lost with more prevalence in Laheeg (23 %), Taiz (19%), Aden(12%) then Hadramoot (5%) see table (10,11,12,13).

When periodontal disease is initiated in the mouth and not treated early, it may result in rapid destruction of periodontal and supporting bone which finally lead to loss of tooth [18].in our research we found that Taiz province has the highest percentage of patient have periodontal disease with percentage 14.2% then Aden with percentage 12.1 % after that Laheeg with 11.3 % and finally Hadhramoot with 9.6 % table (14). This give us a strong correlation between the oral hygiene and periodontal disease in which Taiz and Aden both have high percentage of patient with poor oral hygiene 63.3 %and 56.7 % respectively see table (2)and (4).

The awareness of maintaining good oral hygiene is different from person to person and from males to females. In table (17) we see that in Hadramoot and Laheeg most of patients brushing their teeth once/day with (35 % (males 23.3% and females 11.7%)) and (40% (males 20% and females 20%)) respectively while in Aden and Taiz the highest percentage of patients never brushing their teeth with (58.3% (males 41.7 % and females 16.7 %)) and (43.3 % (males 16.7 % and females 26.7 %)) respectively.

The awareness of patient to tooth brushing, the highest percentage of patients never brushing their teeth with 35% and males are more than females with 20%for males and 15%for females. Females have more concern about their teeth cleaning and they have the greatest percentage of cleaning their teeth twice /day (12.1%) while males has (11.3 %) see table(18).

CONCLUSION

1. Female's patients are more concern with oral hygiene by more frequent tooth brushing.
2. Diabetes is the most frequent systemic disease associated with loss of teeth.
3. Maintain good oral hygiene will increase to long period time of usage and the prognosis of dental prosthesis.

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