ORAL HYGIENE IN PATIENTS WITH FIXED PROSTHODONTIC RESTORATIONS

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Introduction

The aim of this study was to estimate the oral hygiene and gingival condition in patients with fixed prosthodontic restorations for a period of 3 months along with the oral hygiene instructions. As well, we examine how factors, such as age, gender, type of fixed dental prosthesis (single crown or fixed partial denture) and material (porcelain fused to metal or acrylic veneered to metal) are statistically associated with oral hygiene and gingival condition.

² Methods

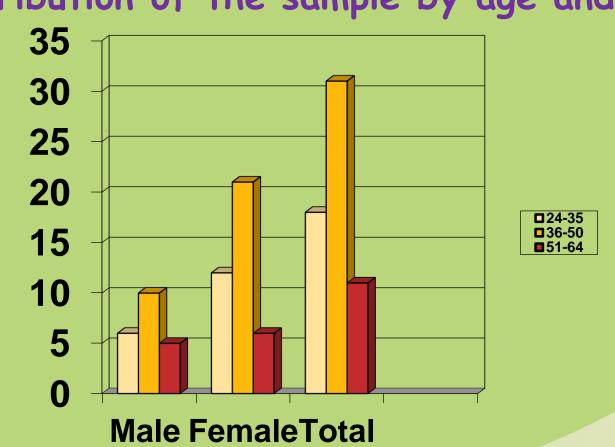
The study included 60 patients with fixed prosthetic appliances. Medical examinations of dental condition were carried out using basic diagnostic tools like dental mirror and periodontal probe. As well, we examine how factors, such as age, gender, type of fixed dental prosthesis (single crown or fixed partial denture) and material (metal or porcelain fused to metal) are statistically associated with oral hygiene and gingival condition. Plaque and Gingiva index was taken according to the method of Silness and Löe. The examination was accomplished on the first dental visit, after 14 days and three months appropriately with the oral hygiene instructions. Statistical analysis was performed by using paired sample t-test from Statistical software SPSS for Windows version 23. A <0.05 was considered as statistically p-value significant.

3 Results

Our results confirmed that the Plaque and Gingiva index had higher values in the first visit than that found in the other periods.

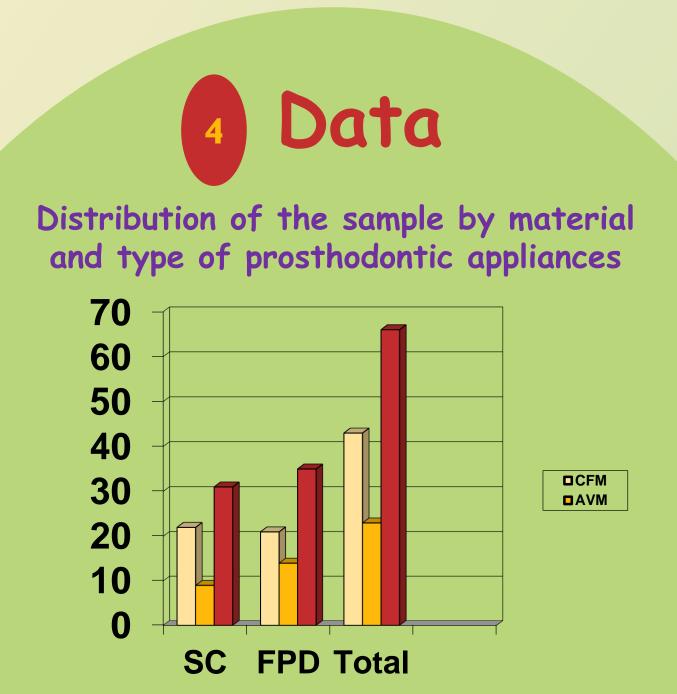
Patients with crowns had better oral hygiene levels compared to fixed dental prosthesis wearers. No statistical differences were found for type of material. Also, younger patients showed better hygiene levels than the older ones.

Distribution of the sample by age and sex



5 Conclusion

Although many studies confirm that prosthetic restorations have a negative effect on oral health, our research showed that adequate education and instructions for oral hygiene maintenance lead to improved oral hygiene both in patients with single crown or fixed dental prosthesis. Considering the type of the material used for prosthodontic appliances, both porcelain-fused-to-metal and acrylic veneered to metal showed no statistically significant difference.



Mean values of Plaque index/Gingival index and type/material of prosthodontic appliances

type/material		Р	laque index/Gingival ind	ex		
	Mean values					
		1 visit	14 days	3 months		
SC CFM	PI	0.8636	0.6818	0.7272		
	StDev	0,7743	0,6463	0,7025		
	StError	0,1650	0,1377	0,1497		
	GI	0.3636	0.2727	0.3181		
	StDev	0,5810	0,4558	0,4767		
	StError	0,1238	0,0971	0,1016		
SC AVM	PI	0.7777	0.5555	0.6666		
	StDev	0,8333	0,7264	0,5		
	StError	0,2777	0,2421	0,1666		
	GI	0.5555	0.3333	0.5555		
	StDev	0,7264	0,5	0,7264		
	StError	0,2421	0,1666	0,2421		
FPD CFM	PI	0.9523	0.5714	0.7619		
	StDev	0,6690	0,6761	0,4364		
	StError	0,1459	0,1475	0,0952		
	GI	0.3333	0.2857	0.2857		
	StDev	0,4830	0,4629	0,4629		
	StError	0,1054	0,1010	0,1010		
FPD AVM	PI	0.8571	0.7142	0.7857		
	StDev	0,7703	0,6112	0,6992		
	StError	0,2058	0,1633	0,1868		
	GI	0,5	0,2857	0,4285		
	StDev	0,7595	0,4688	0,5135		
	StError	0,2029	0,1252	0,1372		

P value						
		1 day/14	14 day/3	1 day/3		
		day	months	months		
SC CFM	PI	0.0212	0.3736	0.1332		
	GI	0.2698	0.3736	0.3573		
SC AVM	PI	0.2234	0.3405	0.2971		
	GI	0.1732	0.2234	0.5		
FPD CFM	PI	0.0038	0.3575	0.0930		
	GI	0.2881	0.5	0.3328		
FPD AVM	PI	0.0824	0.2914	0.2914		
	GI	0.0411	0.1677	0.3356		

Paired sample t-test; p<0.05 significant; p>0.05 not significant