



EVALUATION OF POST OPERATIVE COMPLAINTS IN FIXED PARTIAL DENTURE WEARERS AND THOSE WITH CROWNS: A QUESTIONNAIRE BASED STUDY

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ABSTRACT

Aim: To evaluate the post-operative complaints of patients having crowns and fixed partial dentures by means of a simple questionnaire.

Methodology: A sample questionnaire with 15 questions was prepared, pertained to the period of the prosthesis in place, the nature of complaint as told by patient in his or her own words, number of units involved, and the type of materials used in fabrication of prosthesis. The study was carried out in patients who visited Saveetha Dental College and Hospitals as outpatients from January 2016 to April 2016. A total of One hundred patients were randomly selected and interviewed.

Objective: All the patients of our dental college who underwent tooth replacement by means of a fixed partial denture and crowns were included in the study to evaluate the problems encountered after post-operative insertion of the prosthesis.

Reason: To create an awareness among the dentists about the problems encountered with our patients and to manage them accordingly as patients' comfort is of at most importance to us.

Result: Most of the failures are due to poor patient care after insertion while the others occur as a result of defective design and inadequate execution of clinical and laboratory procedures. In this study, clinic survey was undertaken to access the patients discomfort after cementation of prosthesis. The most common problem encountered was looseness and repeated dislodgement. Other complains such as food impaction, inability to maintain oral hygiene, sensitivity, pain and esthetic issues were also encountered.

Conclusion: The knowledge regarding the clinical Fixed Partial Denture complications enhances students' ability to complete a through diagnosis, developed most appropriate to patients and communicate realistic expectations to patients and plan time internals needed for post-treatment care in the dental institutions

Key Words: Fixed partial dentures, Post-operative complaints, Crowns, Evaluation

INTRODUCTION

The conventional crown and fixed partial denture treatment modality is very common in practice and is highly successful in restoring the functions of lost or missing teeth. In this endeavour, the proper selection of the case, careful diagnosis, meticulous preparation, and a professional construction of prosthesis are mandatory to success and longevity of restoration and maintenance of health of biological investing tissues. Fixed Partial Dentures requires significant amount of tooth structure to be removed. In spite of tooth preparation,

pulp vitality of the abutments should be maintained by protecting the prepared abutment with provisional fixed partial denture. This provisional fixed partial denture is an essential and key step in fixed prostheses.

Most if the time patients reported with post cementation complaints and complications in their fixed prosthesis, especially when the prosthesis was cemented on teeth with vital pulp. The incidence of post cementation complaints and complications is often underestimated by most clinicians. Knowledge regarding the clinical complications that can occur in fixed prosthodontics enhances the clinician's ability to

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communicate realistic expectations to patients, and plan the time intervals needed for post-treatment care.

One of the purposes of this article is to present data regarding the incidence of clinical complications associated with fixed partial dentures and single crowns. The second purpose is to identify the most common complications associated with each of these restorations/prostheses.

MATERIALS AND METHODS

A sample questionnaire with 15 questions was prepared, pertained to the period of the prosthesis in place, the nature of complaint as told by patient in his or her own words, number of units involved, and the type of materials used in fabrication of prosthesis. The study was carried out in patients who visited Saveetha Dental College and Hospitals as outpatients from January 2016 to April 2016. A total of One hundred patients were randomly selected and interviewed.

RESULTS

A total of 100 patients took part in this survey, of which 57 were males and 43 were females. Among 100 patients, 56% of them had fixed partial dentures and 36% of them had crowns and about 8% of them had both. A majority of them of about 40% had a 3 unit fixed partial dentures, 16% had 2 unit fixed partial dentures, 12% had four unit fixed partial dentures. Of the crown wearers 30% of them had single crowns and 2% had multiple crowns. Regarding the material used, 52% of them had metal ceramic, 23% had all metal, and 25% had all ceramic. 21% of the patients interviewed had replaced their prosthesis of which 68% had replaced once, 22% replaces twice and 10% replaced thrice. 80% of them had post cementation complaints and discomfort in their prostheses. 20% of them were satisfied without any complaints.

Regarding the nature of problems faced with the fixed partial denture and crown wearers, 52% of them reported with looseness and repeated dislodgment while 48% of them had no such complaints. The second most common problem encountered with the patients was inability to maintain proper oral hygiene. 51% of the patients found it difficult to maintain oral hygiene. 40% of the patients reported with complaints of food impaction and pain under the denture/crown. 38% of them found difficulty in mastication whereas the rest 62% were comfortable during mastication. Regarding the other factors, only less number of patients reported. Halitosis was also complained by 32% of the patients. 28% of them reported with sensitivity in that region. 27% complained of the color of the prostheses faded away. 16% of them had problems with esthetics. 12% of them reported with breakage

of prostheses. And only 8% reported with breakage of tooth under the prostheses.

DISCUSSION

A primary foundation of long term success with crown and Fixed Partial Denture is to achieve good patient recall compliance. Risk of course and Fixed Partial Denture failures are divided into 4 factors, patient related, infection related, load related and technique and design related factors. Most of the failures are due to poor patient care after insertion while the others occur as a result of defective design and inadequate execution of clinical and laboratory procedures. In this study, clinic survey was undertaken to assess the patients discomfort after cementation of prosthesis. In this study, 80% of patients complaints of discomfort after cementation of prosthesis. Among these patients, the most common complaints were loss of retention and repeated dislodgement, difficulty in maintaining oral health hygiene. This report was consistent in other clinic survey done on patients to assess the cause of failures in crowns and Fixed Partial Denture. It might be due to improper preparation of tooth with too much taper of proximal walls improper cementations. 40% of patients reported with inability to chew food, food accumulation, color fading away, pain under denture, bad breath, sensitivity in that region. The least number of patient's complaints of problems with esthetics, breakage of denture, breakage of tooth under crown. The report of this study was consistent with earlier literatures. This survey makes it mandatory in the dental students to strictly to basic principles of fixed bridge prosthodontics

CONCLUSION

The knowledge regarding the clinical Fixed Partial Denture complications enhances students' ability to complete a thorough diagnosis, developed most appropriate to patients and communicate realistic expectations to patients and plan time intervals needed for post-treatment care in the dental institutions.

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Table 1: Post-operative complaints

	YES	NO
Looseness and repeated dislodgment?	52%	48%
Unable to chew food?	38%	62%
Food gets stuck?	40%	60%
Color fades away?	27%	73%
Problem with esthetics?	16%	84%
Breakage of denture/crown?	12%	88%
Breakage of tooth under crown?	8%	92%
Pain under the denture/crown?	40%	60%
Sensitivity in that region?	28%	72%
Are you able to maintain proper oral hygiene?	49%	51%
Bad breath due to denture/crown?	32%	68%

Educational qualification

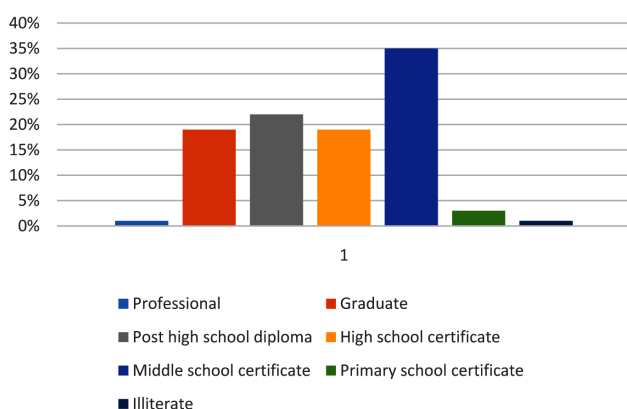


Figure 1: Educational Qualification.

Occupation

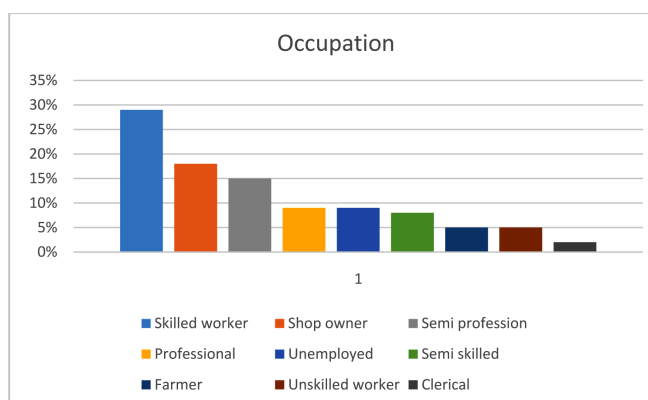


Figure 2: Occupation.

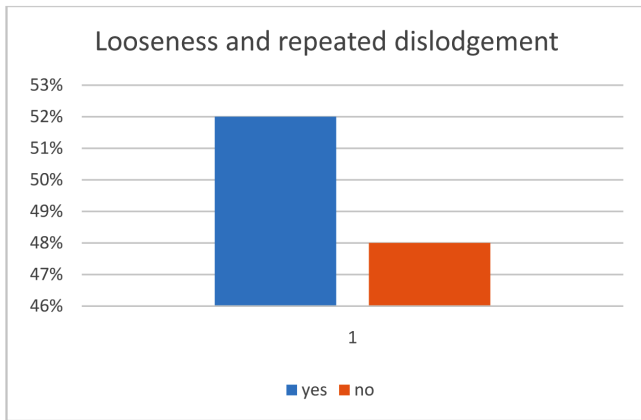


Figure 3: Looseness and repeated dislodgement.

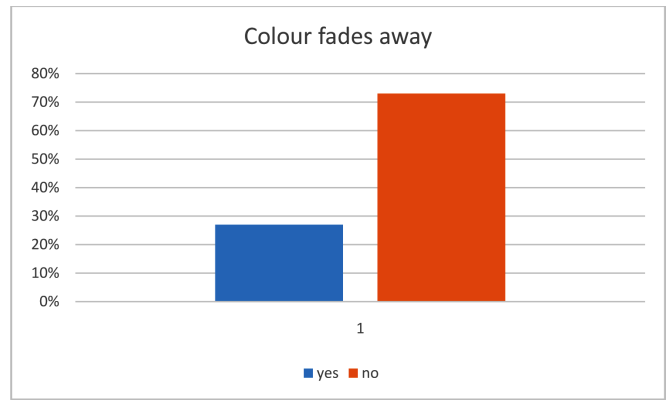


Figure 6: Colour fades away.

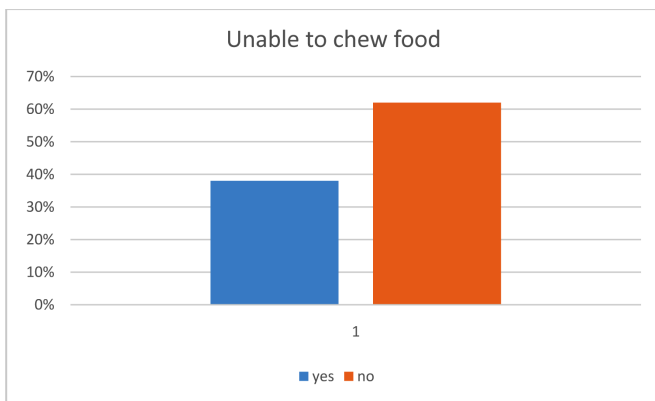


Figure 4: Unable to chew food.

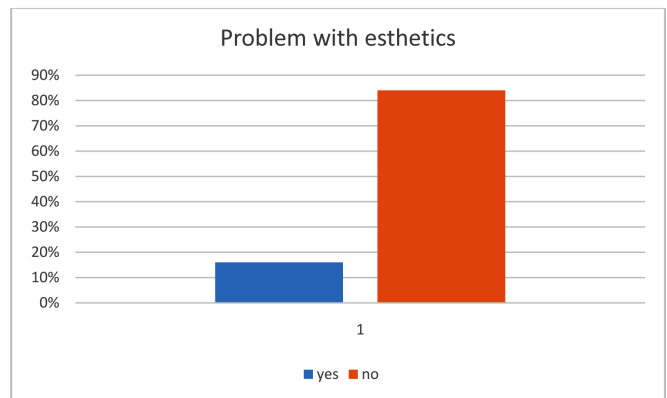


Figure 7: Problem with esthetics.

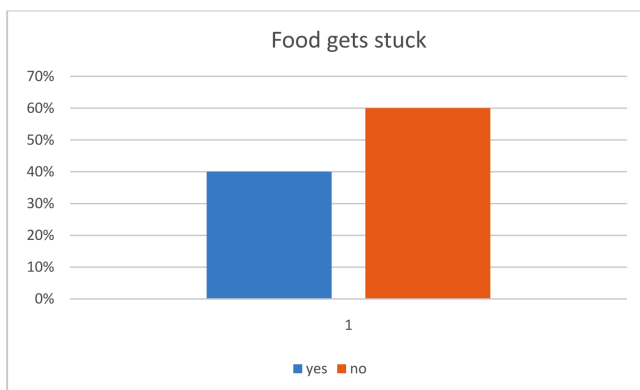


Figure 5: Food gets stuck.

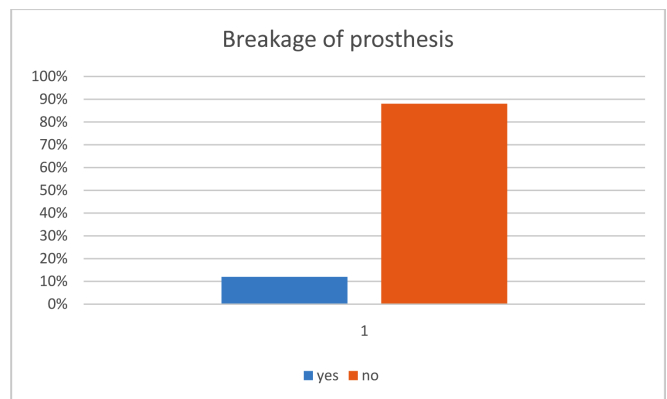


Figure 8: Breakage of prosthesis.

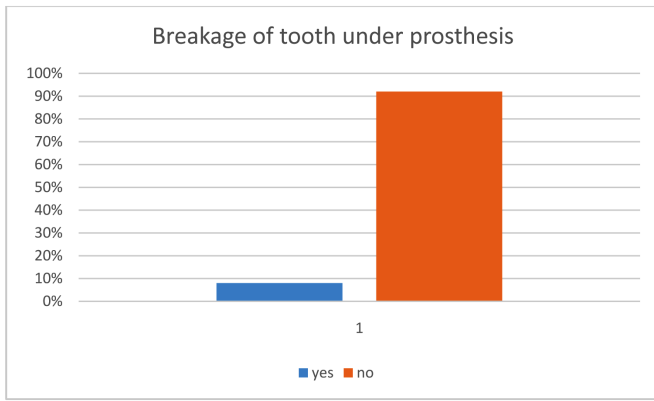


Figure 9: Breakage of toot under prosthesis.

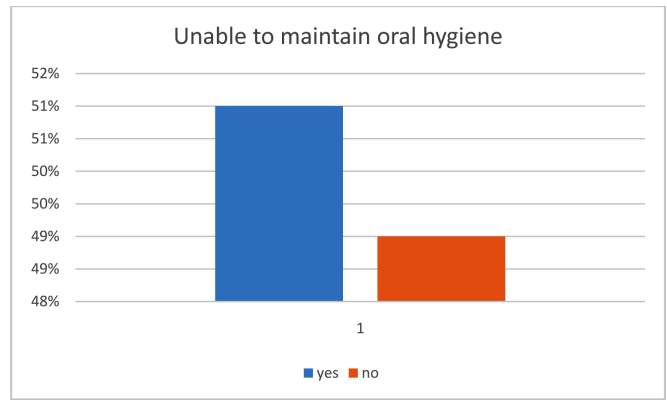


Figure 12: Unable to maintain oral hygiene.

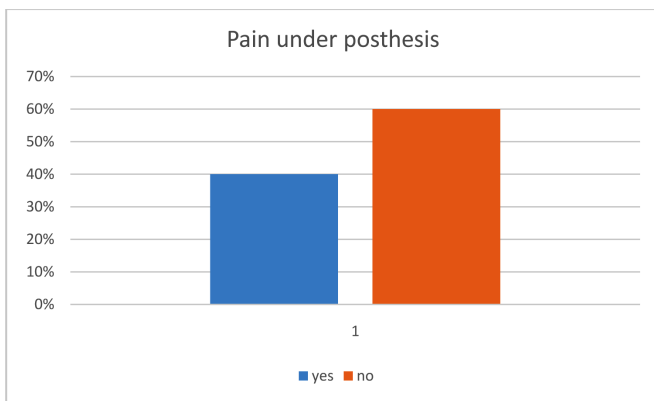


Figure 10: Pain under prosthesis.

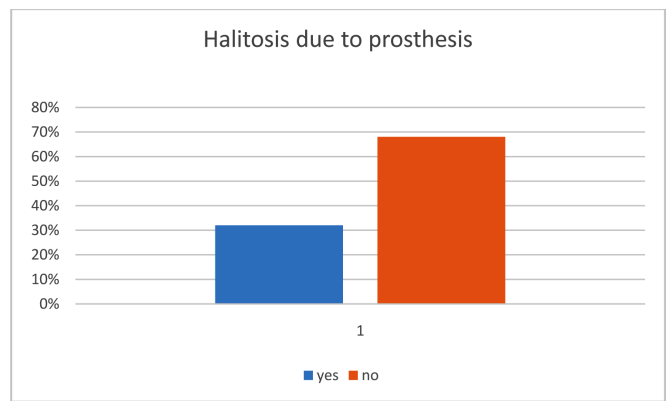


Figure 13: Halitosis due to prosthesis.

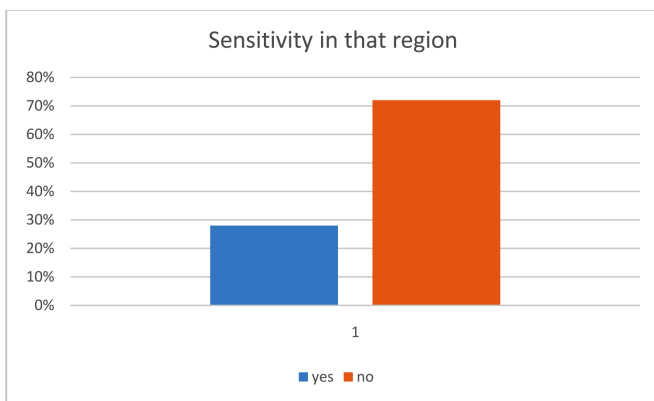


Figure 11: Sensitivity in that region.

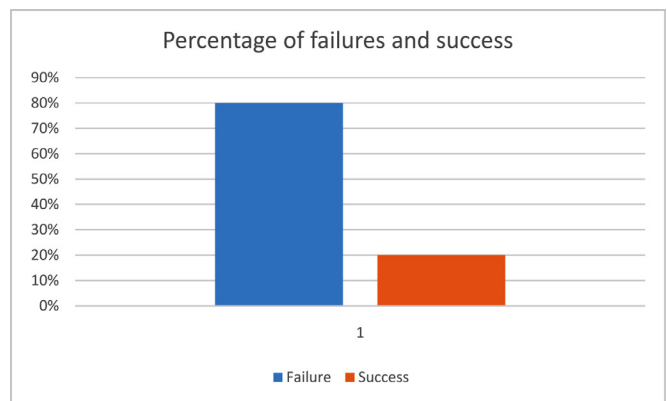


Figure 14: Percentage of failure and success.