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A survey on Isolation Protocols for Cementation of Dental Prosthesis followed among Dental Students.

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Abstract:

Aim:

The aim of this article was to evaluate the rate of clinical protocols followed by the dental students in achieving success of dental prosthesis.

Objective:

The purpose of this study was to evaluate the clinical protocols followed by dental students and to create awareness regarding the importance of protocols in achieving successful bonding.

Methodology:

A total of 150 students who are practicing in dental clinics were included in this study. The rate of clinical protocols followed by students were assessed based on a self explanatory questionnaire, and evaluated by statistics. **Reason:**

The most common reason for failure of treatment in dental prosthesis is debonding due to improper isolation and protocols followed before the bonding.with this in mind isolation and other clinical protocols should be followed for achieving the success of treatment.Hence to evaluate the rate and level of protocols followed by students this research is done.

INTRODUCTION:

Continuous development of technology in dental medicine and the high esthetic demands of the patients determined a increased in awareness regarding the success of treatment among the clinical practice of dental students. The longevity of prosthesis depends on the type of luting cement, isolation techniques, and the protocols used with tooth preparation. The clinician's understating of various cements, their advantages and disadvantages is of utmost importance. In recent years, isolation techniques, protocol measures, luting agents cements have been introduced claiming clinicallybetter performance than existing improved characteristics. materials due to Both conventional and contemporary dentalluting cements are discussed here. The various agents discussedare: Zinc phosphate, Zinc polycarboxylate, Zinc oxideeugenol, Glass-ionomer, Resin modified GIC, Compomers and Resincement. The purpose of this article is to provide a discussion regarding the level of awareness that provides a clinical perspective of different isolation techniques, protocol measures, luting cements currently available to help the general practitioner make smarter and appropriate choices.

METHOD AND MATERIAL:

Total of 150 students who are practicing in dental clinics in saveetha dental college were included in this study.A questionnaire containing 15 questions focused on the perceptions and experiences on protocols followed by dental students for cementation of prosthesis were given to them.The data obtained was analysed to achieve the results.

QUESTIONNAIRE:

Year of study:

- 1) Are you aware of the protocols to be followed for cementation of dental prosthesis?
- a) Yes.
- b) No
- 2) what are the protocols do you follow?
- a) Isolation.
- b) retentive properties
- c) suitable cement selection.
- d)Proper trial in
- e) All the above.
- 3) what are the isolation method do you follow?
- a) cotton rolls.
- b)Rubber dam
- c) Retraction cords.
- d) Airway syringe
- 4) Do u instruct the patients regarding the maintenance of prosthesis?
- a)Yes.
- b) No
- 5) Do you follow all the steps necessary for the proper fabrication of the prosthesis?
- a) Yes
- b) No
- 6) Have you ever experienced the effects of failure of cementation of prosthesis?
- a) Yes
- b)No

7) If so what do you think the reason is a)intermediate material fill spacesb)undercutsc)Irregularities between two materials

d)inadequate isolation

- 8) Which step do you think is crucial for the prevention of failure of cementation of prosthesis?
- a) proper isolation.
- b) Retentive factor
- c)suitable restorative material.
- d) proper trail in
- 9) How long do you think the life span of the prosthesis after cementation
- a)<5 years.
- b) > 5years
- 10) What is the most common reasons do you think for replacement of dental prosthesis?

a)periodontal disease.

- b) secondary caries
- c) Fracture of crown
- d) Lack of retention.
- 11) Which material in your opinion requires more precautions measures?
- a)Metal.
- b) Ceramic.
- c) Zirconia.
- d) Metal ceramic
- 12) What are usual complaints patients tell to you after cementation of prosthesis?
- a) Unaesthetic.
- b) Phonetics problem
- c) Discomfort.
- d) pain
- 13) What are the difficulties you used to face after cementation?
- a) Excessive cement.
- b)Deficiency
- c)Debonding.
- d) Unaesthetic
- 14) What are the conditions you recommend for new prosthesis?
- a) lack of retention.
- b) Deficient crown.
- C) Discomfort.
- d) Unaesthetic.
- 15) What are the steps do you follow during recementation of prosthesis?a)Better isolation.b) Selection of suitable luting cementc) uniform sealingd)All the above











Reason for debonding of prosthesis



Material requiring more precaution







DISCUSSION:

In this study,85% of students reported that they followed cotton roll for isolation,24% students reported that failure of cementation due to inadequate isolation,33% of students reported that their patients complaints of unaesthetic,than discomfort and loss of retentionhence proper material, shade selection have to chosen duringtrail in.52% of students reported proper isolation have to be done with suitable cement selection during recementation of prosthesis to prevent the debonding of the prosthesis.The results of this survey examined the perceptions and attitudes of dental students who are under practice were described.The data obtained in this survey confirm the clinical experiences of many restorative dentists. Most

patients desire functional, comfortable, and particularly, esthetic restorations. They are sensitive to changes that occur when provisional restorations are replaced by definitive crowns and fixed partial dentures. Tooth preparation and impression procedures are perceived as the most unpleasant steps in the treatment process. This data will enable dental students in resulting successsful treatment.

CONCLUSION:

The data have implications for the overall treatment process. With an appreciation for the perceptions and attitudes of fixed prosthodontic patients, the restorative dentist is prepared more completely to provide satisfying restorations. Through increased awareness of dental students expectations and experiences, restorations can be planned, made and placed in harmony with the hard and soft oral tissues, and in harmony with the patient's expectations as well.

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