KNOWLEDGE, ATTITUDE AND PRACTICE AMONG DENTAL PRACTITIONERS REGARDING ADHESIVES IN PATIENTS WEARING MAXILLOFACIAL PROSTHESIS

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ABSTRACT

Background: Satisfying the expectations of maxillofacial patients for optimal esthetics and stability is often beyond the technical skills of even the most accomplished practitioners. Knowing the use of denture adhesives may help to satisfy the expectations of specific patients and achieve their intended treatment goals.

Aim: To create awareness in dental practitioners about the adhesives given to patients wearing Maxillofacial Prosthesis.

Materials and methods: A random sample of 100 dental practitioners was selected and included for this study. The survey questions focused on knowledge, attitude and practice of adhesives given to patients wearing Maxillofacial Prosthesis. The dental practitioners had minimum of one year of clinical experience after their dental education.

Results: 60% of the dental practitioners were aware of adhesives given to patients wearing Maxillofacial Prosthesis and 40% of the dental practitioners were not aware of adhesives. In this survey, dental practitioners were more aware of types of adhesives given to the patient particularly the adhesive epithane -3 and cosmetics and functional rehabilitation. 40% of the dental practitioners were unaware about the duration and side effects of adhesives in Maxillofacial Prosthesis patients.

Conclusion: Unawareness of the dental practitioners regarding adhesives in Maxillofacial prosthetic patient may be due to lack of knowledge and practise. This can be improved by continuing dental education programs and highlight the adhesives in Maxillofacial Prosthesis.

INTRODUCTION

Maxillofacial defects may be a result of congenital malformations, trauma or surgical resection of tumors. Among various maxillofacial defects, intra oral defects in the form of clefts and opening into the palate are very common. Several methods have been advocated for reconstructing these defects. The use of an obturator prosthesis is one of them. Effective obturation of maxillary defects produces sufficient separation of the oral and nasal cavity to improve the quality and intelligibility of speech. It also enhances masticatory function, deglutition and esthetics. The weight of maxillary obturator prosthesis is often a factor to be considered with respect to retention and comfort of the patient. Hence it is desirable to design light weight prostheses. Prosthetic intervention should occur at the time of surgical resection and will be necessary for the remainder of the patient life.

However Maxillofacial Prosthesis is not uncomfortable for some patients with mouth lesions.In order to give full support, adhesives can be given to reduce irritation while wearing maxillary obituary Prosthesis. The success of most maxillofacial prostheses depends on retention by medical adhesives. Products such as Smith-Nephew's Skin-Prep (SP) are available that can be used on the skin that could improve prosthesis adhesion protective dressing. The removal of adhesive from the skin is also problematic, so solvents, such as Uni-Solve adhesive remover (US), are often used.

MATERIALS AND METHODS

A questionnaire was distributed to 100 dental practitioners to provide knowledge about adhesive in patients wearing maxillofacial prosthesis (Table 1). The questionnaire is prepared based on knowledge about adhesives given to patients wearing maxillofacial prosthesis. The questionnaire involved type of adhesives, duration of adhesives, types of Maxillofacial prosthesis, about its cosmetic and functional rehabilitation and whether it causes side effects. The questionnaire contained 10 questions and was distributed through online link using survey planet and it was circulated to the practitioners. The results were statistically analysed.
Once the questionnaire were completed, a basic lecture about adhesives in Maxillofacial Prosthesis.

**RESULTS**

In the present study, the questionnaire was distributed to 100 dental practitioners. Majority of the practitioners (70%) were aware of maxillofacial prosthesis, while the others were unaware (Figure 1).

Most of the practitioners (60%) answered that both intraoral and extraoral are the types of maxillofacial prosthesis, few people (33%) do not know the types (Figure 2).

82% of dental practitioners were not known about the duration of adhesives in maxillofacial prosthesis (Figure 6). 67% of dental practitioners were aware of the types of adhesives given to patients (Figure 7). 63% of dental practitioners chose epithane-3 type of adhesive while few of them (20%) did not know about the types of adhesives used (Figure 8).

The practitioners described that there are equal chances (50%) for maxillofacial prosthesis both having and not having side effects (Figure 4).

### Tables 1 Survey Questionnaire

| Questions                                                                 | Choices                | Percentage |
|---------------------------------------------------------------------------|------------------------|------------|
| 1. Are you aware of Maxillofacial Prosthesis?                             | 1) Yes                 | 70%        |
|                                                                          | 2) No                  | 30%        |
| 2. What are the types of maxillofacial Prosthesis?                        | 1) Intraoral           | 2%         |
|                                                                          | 2) Extra oral          | 5%         |
|                                                                          | 3) Both                | 60%        |
|                                                                          | 4) Don’t know          | 33%        |
| 3. Does it improve the cosmetic and functional rehabilitation?            | 1) Yes                 | 63%        |
|                                                                          | 2) No                  | 37%        |
| 4. Does Maxillofacial Prosthesis leads to any side effects?              | 1) Yes                 | 50%        |
|                                                                          | 2) No                  | 50%        |
| 5. Are you aware of the adhesives used in Maxillofacial Prosthesis patients? | 1) Yes                 | 58%        |
|                                                                          | 2) No                  | 42%        |
| 6. Do you know the duration of adhesives after applying to patients?     | 1) Yes                 | 18%        |
|                                                                          | 2) No                  | 82%        |
| 7. Are you aware of the types of adhesives given to patients?             | 1) Yes                 | 66%        |
|                                                                          | 2) No                  | 34%        |
|                                                                          | 1) Skin prep adhesive  | 12%        |
|                                                                          | 2) Secure medical adhesive | 5%    |
| 8. If yes, Which adhesive do you prefer?                                  | 1) Epithane-3          | 63%        |
|                                                                          | 4) Don’t know          | 20%        |
prosthesis for the patients was nearly 60-70 % But some patients with skin irritation felt uncomfortable in wearing Maxillofacial Prosthesis. In the present study, applying adhesives like epithane -3 and secure medical adhesives, it will significantly reduce skin irritations and provide 100% success rate for patients wearing maxillofacial prosthesis. Many of the dental practitioners were aware of adhesives given to maxillofacial prosthesis wearing patients but they are unaware of duration of adhesives after applying to patients. So this study will help for future dental practitioners in finding out the advancements about adhesives and achieving higher success rate with patients wearing maxillofacial Prosthesis at ease.

CONCLUSION

Most of the dental practitioners were aware about the maxillofacial Prosthesis but still knowledge on clinical skills is necessary to prevent the prosthesis failure in terms of retention and stability. Further awareness would enhance the efficacy of usage and overcome the difficulties faced while practicing among dental practitioners.

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