



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

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ARTICLE INFO

Article History:

Received 20th December, 2016

Received in revised form 24th January, 2017

Accepted 4th February, 2017

Published online 28th March, 2017

Key words:

Knowledge, Adhesives, Maxillofacial Prosthesis, Survey, Questionnaire

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.

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INTRODUCTION

Maxillofacial defects may be a result of congenital malformations, trauma or surgical resection of tumors.^{[1],[2]} The primary objective of rehabilitating these defects is to eliminate the disease and to improve the quality of life for these individuals.^{[3],[4],[5]} 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^[6]. 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.^{[7],[8],[9]} 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 prosthesis^{[10],[11],[12]}. Prosthetic intervention should occur at the time of surgical resection and will be necessary for the remainder of the patient life.

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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 obturator 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.

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	5%
8.If yes, Which adhesive do you prefer ?	3)Epithane-3	63%
	4)Don't know	20%

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).

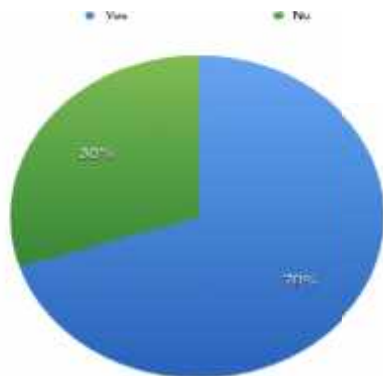


Figure 1 Are you aware of Maxillofacial Prosthesis?

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).

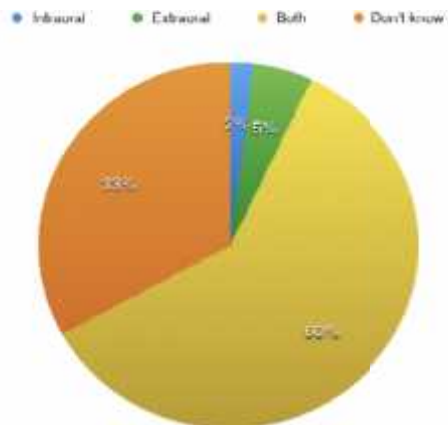


Figure 2 What are the types of Maxillofacial prosthesis?

Maximum of the practitioners (67%) explained that it improves cosmetic and functional rehabilitation (Figure 3).

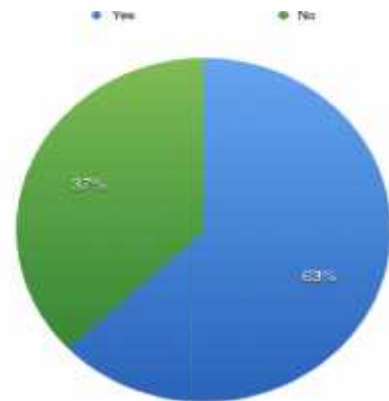


Figure 3 Does it improve the cosmetic and functional rehabilitation?

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

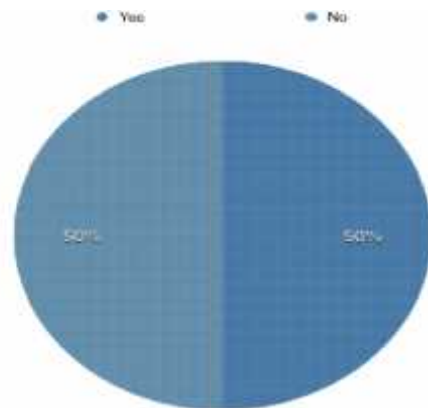


Figure 4 Does Maxillofacial Prosthesis leads to any side effects?

Majority of the practitioners (58%) were aware that adhesives are used in the maxillofacial prosthesis (Figure 5).

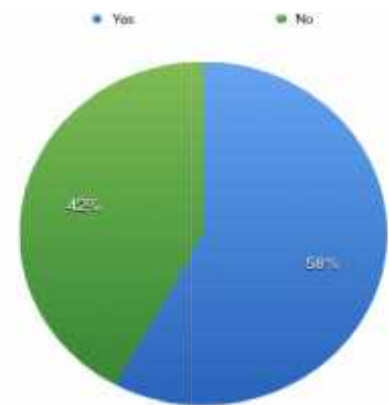


Figure 5 Are you aware of adhesives used in Maxillofacial Prosthesis patients?

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).

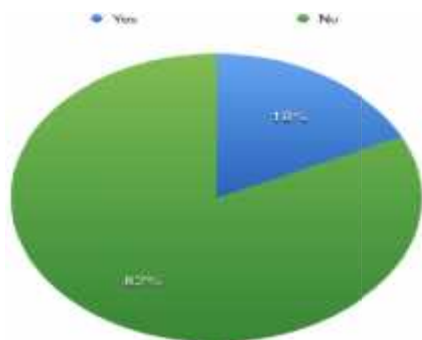


Figure 6 Do you know the duration of adhesives after applying to patients?

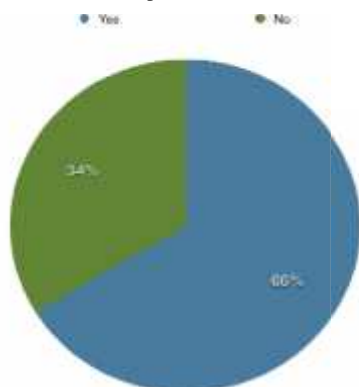


Figure 7 Are you aware of the types of adhesives given to patients?

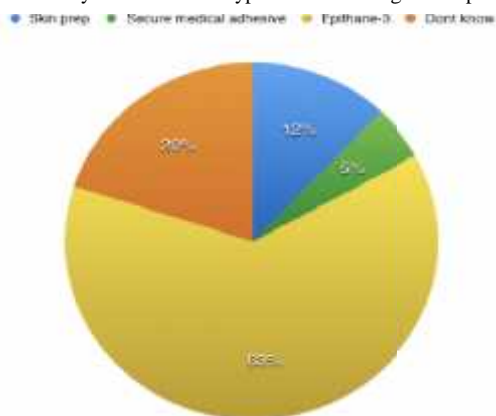


Figure 8 If yes, Which adhesive do you prefer?

DISCUSSION

There are many studies which explains about Maxillofacial prosthesis and its recent advances. Dr.Amol R.Barhate (Rural dental college, Loni) has done systematic review on Maxillofacial prosthesis. Seema Pattanaik and Aarti P. Wadkar has done research on Rehabilitation of a Patient with an Intra Oral Prosthesis and an Extra Oral Orbital Prosthesis Retained with Magnets. Dr.Rohit Ragavan has done a review on recent advances on Maxillofacial Prosthesis. This study describes about alginates used in Maxillofacial Prosthesis. Another important study done by Marcelo Coelho Goiato is the patient satisfaction with maxillofacial prosthesis. It was a review where patients with Maxillofacial defects were given aesthetical maxillary obituary Prosthesis.^[13] Rehabilitation through alloplasty or prosthetic restoration provides satisfactory conditions in aesthetics and well-being and reinstates individuals in familial and social environment.^{[14],[15]} The success rate of Maxillofacial

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 practioners 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 practioners 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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How to cite this article:

Karthikeson P.S *et al* (2017) ' Knowledge, Attitude And Practice Among Dental Practitioners Regarding Adhesives In Patients Wearing Maxillofacial Prosthesis', *International Journal of Current Advanced Research*, 06(03), pp. 2894-2897. DOI: <http://dx.doi.org/10.24327/ijcar.2017.2897.0135>
