

ORIGINAL ARTICLE

A KAP Based on the choice of Suture Material and Management of Wound among Oral Surgeons

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Background: Suturing is a crucial part of any oral surgical procedure. Sutures are of two types- absorbable and non absorbable. The main aim of the present study is to perform a knowledge, attitude and practice of oral surgeons based on the choice of suture material for the management of wound. **Materials and Methods:** This study includes 150 subjects. The study was conducted by the Department of oral and maxillofacial surgery, Institute, State. The subjects were made to fill the survey based on their daily practice. The subjects were made to fill the questionnaire through an online portal. They were informed about the study. All the data was arranged in a tabulated form and analysed using SPSS software. The results were analysed using chi square test and p value of less than 0.05 was considered significant. **Results:** There were 84.7% (n=127) who considered suturing essential after every oral surgical procedure. There were 15.3% (n=23) surgeons who sutured only when it was necessary. There were 95.3% (n=143) subjects who were aware of types of suture material. Rest 4.7% had faint idea. There were 82% subjects who had idea about the resorption time of various sutures. **Conclusion:** From the study we can conclude that there is sufficient knowledge amongst the oral surgeons regarding the suturing technique and type of sutures

Key words: Crucial, Resorption, Sutures.

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This article may be cited as: Bhagat SK, Hussain S, Kak V, Janbaz ZA, Radha A. A KAP Based on the choice of Suture Material and Management of Wound among Oral Surgeons. J Adv Med Dent Scie Res 2017;5(12):130-132.

Access this article online	
<p>Quick Response Code</p> 	Website: www.jamdsr.com
	DOI: 10.21276/jamdsr.2017.5.12.38

INTRODUCTION

Suturing is a crucial part of any oral surgical procedure. Sutures are of two types- absorbable and non absorbable. The most commonly used non absorbable sutures in oral surgery are 3-0 mersilk. The absorbable sutures are gut sutures that are composed of collagen and are derived from bovine serosal layer. They are further of two types- plain and chromic. The disadvantage of plain gut sutures is quick resorption rate, in order to decrease the rate of resorption they are treated with chromic acid. Chromic gut sutures last for 7 to 10 days.¹

Resorption of the sutures occurs by two mechanisms. The sutures of biological origin are resorbed by enzymes present in tissues. Synthetic resorbable sutures like polyglycolic acid are resorbed by the kreb's cycle. Plain gut sutures loses their tensile strength in 24 to 48 hours but on coating them with chromic acid the tensile strength extends to another 5 days.² The sutures come in varying sizes ranging from 5-0 to 2. They are further braided and non braided. The braided one harbour more bacteria during a period of time. Presence of chrome also provided

greater wound support.³ Suturing leads to close approximation of the wound that is generally required for promotion of healing.⁴ The main aim of the present study is to perform a knowledge, attitude and practice of oral surgeons based on the choice of suture material for the management of wound.

MATERIALS AND METHODS

This study includes 150 subjects. The study was conducted by the Department of oral and maxillofacial surgery, Institute, State. This survey consisted of oral surgeons that were involved in private practice. This was a questionnaire based survey and the subject's identity was kept secret. The study consisted of questions regarding the knowledge, awareness and practice about suturing and wound management amongst the surgeons. The subjects were made to fill the survey based on their daily practice. The subjects were made to fill the questionnaire through an online portal. They were informed about the study. All the data was arranged in a tabulated form and analysed using SPSS software. The

results were analysed using chi square test and p value of less than 0.05 was considered significant.

RESULTS

The present study enrolled 150 oral surgeons. The mean age of the surgeons was 29.34 +/- 5.48 years. There were 62 females and 88 males in the study

Table 1 shows the attitude and practice of the surgeons regarding the type of sutures. There were 42% (n=63) of the surgeons who encountered difficulty during suturing. Rest 58% considered it to be easy. There were 39.3% (n=59) who had idea about the common uses of suturing. There were 60.7%(91) who had vague idea about uses of sutures. There was no significant difference in the two groups. There were 84.7% (n=127) who considered suturing essential after every oral surgical procedure. There were 15.3% (n=23) surgeons who sutured only when it was necessary. There were 15.3% (n=23) subjects aware of alternatives of suturing and used adhesives instead of sutures. Rest 84.7% thought there was no substitute of suturing. There was a significant difference between the two groups.

Table 2 shows the knowledge of surgeons regarding sutures. There were 95.3% (n=143) subjects who were aware of types of suture material. Rest 4.7% had faint idea. There were 82% subjects who had idea about the resorption time of various sutures. 79.3% subjects were aware about the composition of various types of sutures. Technique of suturing was known by 89.3% of the sutures. There was significant awareness of the subjects regarding suturing and sutures.

Table 1: Attitude and practice of surgeons regarding type of sutures

Variable	Yes (N/%)	No (N/%)	P Value
Difficulty in suturing	63(42%)	87(58%)	>0.05
Common uses	59(39.3%)	91(60.7%)	>0.05
Need of suturing	127 (84.7%)	23(15.3%)	<0.05
Alternative to suturing	23(15.3%)	127(84.7%)	<0.05

Table 2: Knowledge of surgeons regarding suturing

Variable	Yes (N/%)	No (N/%)	P Value
Types of suture material	143(95.3%)	7(4.7%)	<0.05
Resorption time	123(82%)	27(18%)	<0.05
Composition	119(79.3%)	31(20.7%)	<0.05
Type of suturing technique	134(89.3%)	16(10.7%)	<0.05

DISCUSSION

Most of the oral surgical procedures need primary closure of the wound through a flap raised previously. For this there are a variety of suturing materials which can be classified according to the origin or according to their durability in host tissues.^{5,6} The chief essential features of a suture should be- stability of knot, capacity to stretch,

tissue reaction and wound safety. The healing of tissue is also dependent on the choice of suture material along with the surgical and suturing technique.^{5,6,7} In a study conducted by Vastardis and Yukna⁸ they reported three cases of complications after using subepithelial connective tissue graft. In their study abscess was formed after the initial healing phase. They concluded that this could be due to reaction of the tissue to the submerged suture material. In our study, there were 42% (n=63) of the surgeons who encountered difficulty during suturing. Rest 58% considered it to be easy. There were 39.3% (n=59) who had idea about the common uses of suturing. There were 60.7%(91) who had vague idea about uses of sutures. There was no significant difference in the two groups. There were 84.7% (n=127) who considered suturing essential after every oral surgical procedure. There were 15.3% (n=23) surgeons who sutured only when it was necessary. There were 15.3% (n=23) subjects aware of alternatives of suturing and used adhesives instead of sutures. Rest 84.7% thought there was no substitute of suturing. There was a significant difference between the two groups. In a study conducted by Graham et al⁹ they found that delayed hypersensitivity reactions to chromic catgut suture are not diagnosed easily postoperatively. According to their study, there were 87% of the dentists who were unaware of the delayed hypersensitivity reactions associated with the use of chromic catgut sutures. In a study conducted by Craig et al¹⁰ there were 46% of the subjects were aware of the composition of chromic cat gut suture and there were 78% of the dental students who were aware of the same. In a study conducted by Grier et al¹¹ in the year 1922, there were 65% of absorbable sutures can be used as deep sutures in case of hepatic, renal and splenic. They can be successfully used as subdermal sutures. In our study, there were 95.3% (n=143) subjects who were aware of types of suture material. Rest 4.7% had faint idea. There were 82% subjects who had idea about the resorption time of various sutures. 79.3% subjects were aware about the composition of various types of sutures. Technique of suturing was known by 89.3% of the sutures. There was significant awareness of the subjects regarding suturing and sutures.

CONCLUSION

From the study we can conclude that there is sufficient knowledge amongst the oral surgeons regarding the suturing technique and type of sutures. However there was lack of awareness regarding the various alternatives to sutures and very less percentage of the surgeons opted for these alternatives.

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Source of support: Nil

Conflict of interest: None declared

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