

## Extraction of maxillary root stumps using reflect- A modified mouth mirror

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### Abstract

Maxillary root stumps are challenging to extract as they can only be viewed by indirect vision and blood oozing out of the socket obstructs the vision. To overcome these problems reflect was invented, it has anti-fogging property and also has a led light for vision. A cross sectional questionnaire was distributed to 9 post graduates in the oral surgery department of Saveetha dental college with the mirror and results were analysed. It was concluded that extraction of maxillary root stumps is easier using reflect.

**Keywords:** Maxillary root, oral surgery,

### 1. Introduction

Dental mouth mirror is the most common instrument used in dentistry. It is used for indirect vision and retraction [1]. However while extracting maxillary root stumps the vision is obstructed by blood from the site of extraction and also fogging of the mirror.

#### 1.1 Aim

The aim of this study was to evaluate the efficiency of reflect in extraction of the maxillary root stumps.

### 2. Materials and method

A cross sectional feedback questionnaire survey was carried out in the department of oral surgery at Saveetha Dental College. The questionnaire was distributed to all surgery postgraduate dental students. (n=9) the study was approved by the Saveetha institutional ethical review board. Students, who agreed to participate in the study, signed a consent form. The self-administered questionnaire comprised 7 questions with regards to efficiency of mouth mirror. All forms were completely filled and collected.

SPSS (statistical package for social studies) version 22.0 (IBM corporation, Chicago, IL, USA) was used for data entry and descriptive statistics including frequencies and proportions. Chi-squared test was used to compare groups.  $P < 0.05$  was considered significant

### 3. Results

Out of the 9 dental surgery pg students participated in the survey, 9 returned questionnaires, giving a response rate of 100%. The mean age of the participants was  $25.13 \pm 1.68$ , ranging from 2 to 23years; 71.3% were females. The sample was comprised of an almost equal distribution of male and female (49% vs. 50.3%).

Table 1 presents the questions and percentage of students answering the appropriate answer.

The first question was information regarding usage of reflect mouth mirror for which 9 of the participants answered yes.

For the second question pertaining whether they it is better than other mirror was answered yes by 8 of participants.

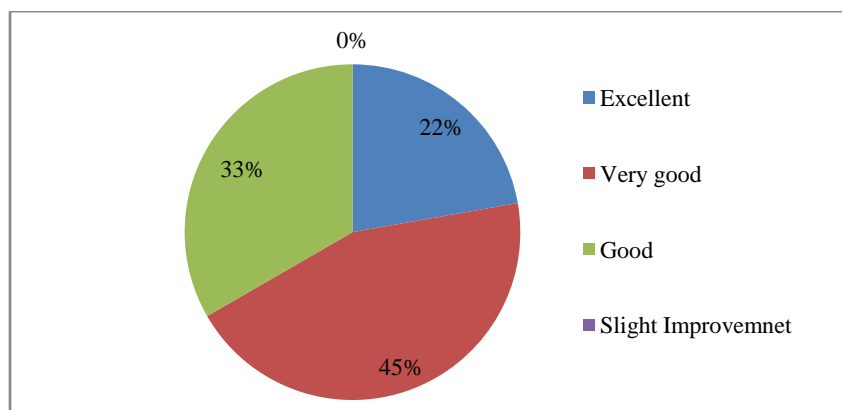
The third and fourth questions were regarding blood staining problem and enhanced vision for which 7 of participants answered yes.

former while of participants responded to later. As of the seventh question regarding visibility in patient, 8 responded yes.

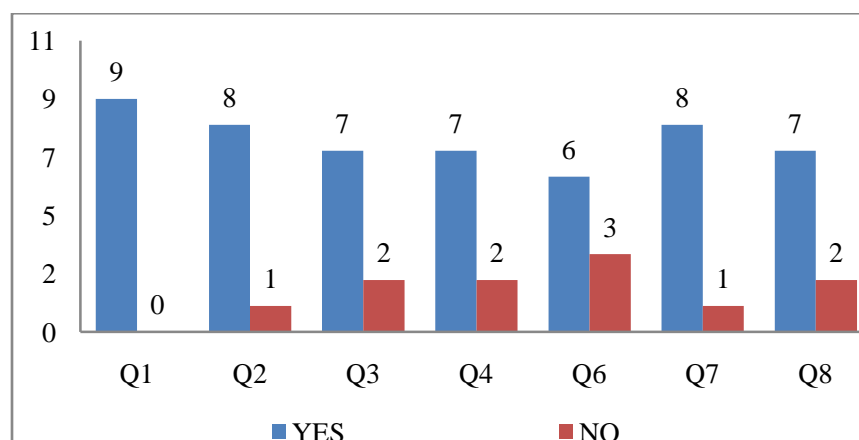
The sixth question was pertaining treatment quality and led light setup efficiency. 6 responded to the

**Table 1: Questionnaire  
Feedback for REFLCT (Mouth Mirror)**

1.	<b>Did you use reflect mouth mirror?</b>	a) Yes	b) No										
2.	<b>Do you think it is better than the regular mouth mirror?</b>	a) Yes	b) No										
3.	<b>Do you think it solves the blood stains problem?</b>	a) Yes	b) No										
4.	<b>Do you think the visibility is enhanced while working on the upper teeth?</b>	a) Yes	b) No										
5.	<b>On a scale of 1 to 5 how would you rate the improvement in visibility?</b>	<table style="width:100%; border:none;"> <tr> <td style="text-align:center;">1</td> <td style="text-align:center;">2</td> <td style="text-align:center;">3</td> <td style="text-align:center;">4</td> <td style="text-align:center;">5</td> </tr> <tr> <td style="text-align:center;">I didn't find any difference</td> <td style="text-align:center;">Sight improvement</td> <td style="text-align:center;">Good</td> <td style="text-align:center;">Very Good</td> <td style="text-align:center;">Excellent</td> </tr> </table>		1	2	3	4	5	I didn't find any difference	Sight improvement	Good	Very Good	Excellent
1	2	3	4	5									
I didn't find any difference	Sight improvement	Good	Very Good	Excellent									
6.	<b>Do you think it enhances the treatment quality while working on the upper teeth?</b>	a) Yes	b) No										
7.	<b>Do you think the LED light is your vision while extracting upper teeth?</b>	a) Yes	b) No										
8.	<b>Do you prefer REFLCT over regular mouth mirror while working on the upper teeth?</b>	a) Yes	b) No										



**Figure 1a: Response of Questionnaire (Question 5) in parentages**



**Figure 1b: Response of Questionnaire in parentages**

#### 4. Discussion

The anti fogging technology may not be a new and unique concept but the technique and patency is a complete new turnabout to the Indian market.[11-14] The valuable consideration of provision of an economic and easy to use and comfortable instrument for improvement of dental efficacy is a novel thought.[15-17]

One of the limitations of this study is the fact that the responses were based on students' self-assessment and usage of a product invented from the same university rather than being provided under the supervision of the investigators from various clinical environments. Therefore, the responses might not have accurately reflected the true levels of feedback, and thus, the reported level of practice might vary when compared with other clinical setup [18]. Moreover, these numbers of questions show the real feedback and practice information of the respondents. Nonetheless, the number of questions was kept to a minimum to improve the response rate and this approach appeared to work well [19-20].

The results of the present study demonstrate the sufficient knowledge regarding reflect mirror among dental surgery postgraduate students in Saveetha dental students.

#### 5. Conclusion

In general, our study showed good compliance with the feedback on reflect mouth mirror among dental students of Saveetha University, as they had an access to it. Therefore, this novel invention warrants more studies on a broader aspect to compete with its German counterparts. The above properties of reflect make it a better option for retrieval of maxillary posterior teeth, when compared to conventional mouth mirror.

**Conflicts of interest:** There are no conflicts of interest.

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