GAG REFLEXES IN DENTISTRY

1Preethi Mariona, 2Gowri Sethu

1Student, 2Professor in Department of Physiology
Saveetha Dental College and Hospital,
162, Poonamalle high road,
Velappanchavadi,
Chennai- 600095. India.

Corresponding author:
Preethi Mariona
Saveetha Dental College and Hospital,
162, Poonamalle high road,
Velappanchavadi,
Chennai- 600095.
India.

TITLE: Gag reflex in dentistry.

AIM:
The impact of gag reflex on patients and dentists.

OBJECTIVE:
A questionnaire based study on the impact of gag reflex on patients and the response given by the dentists who are interns.

BACKGROUND:
The gag reflex is generally to be controlled by the hypothalamus of the brain. Most of the patients undergoing dental procedures have gag reflexes. Virtually all dentists will experience this phenomenon sometime in their careers. The methods they use to overcome this and comfort the patient was evaluated by a survey method.

REASON:
Observation during the clinical secessions and the urge to find out the reason led me into the topic.

INTRODUCTION
Dentistry is an art which requires a lot of patience and methods to deal with dental problems carefully. There are many problems that would arise during the course of treatment. One of the most common being gag reflexes. (1,2,3) A gag reflex action or movement, the sum total of any particular response mediated by the nervous system. Gagging is a phenomenon which indicates that something which is not a part of natural food is entering the throat and might cause choking.(4,5) The elevation of soft palate and retching which is elicited by the touching the back of the tongue or the wall of pharynx and is also known as pharyngeal reflex. (6,7,8,9) It is a natural defense mechanism of our body.

In dentistry, when most treatments are performed, the patient may feel a gagging sensation because the instruments used might touch the sensitive parts in the oral cavity. The reflex is controlled by the hypothalamus of brain. (10,11,12) Most patients tend to have a bitter experience with the dentist because of gagging sensations. The extent of this sensation depends on how sensitive the persons reflexes are. Gagging response can also be a physical action of panic, fear of swallowing something.(13,14) This mostly occurs while taking impressions where the viscous impression oozing in the mouth causing gagging. Some people face a lot of fear that at one point of time even brushing becomes hard for them. Emetophobia (the fear of vomiting) coupled with gagging is almost very commonly seen in many patients undergoing dental treatment.(15,16)

Some of these patients find it very difficult to eat or even perform some activities when faced by gagging. There are no particular causes for gag reflexes as such. It is just an aversion. (17,18,19) Gagging is common in infants as they are not able to swallow much of the food properly.

The study was conducted to find out the incidence of gagging assessed by dentists.

MATERIALS AND METHOD:
A survey was conducted among 30 dentists. A questionnaire was prepared which consisted of questions about the reaction of dentists and the patient to gag reflex during the course of treatment.

GAG REFLEX IN DENTISTRY

AGE :
SEX : MAKE / FEMALE
QUALIFICATION : BDS / MDS
INSTRUCTIONS:
If the answer was found to be appropriate for the field the option YES should be ticked and if not NO.

What is the frequency of patients do you face with gagging?
a) 1 in 10  b) 4 in 10  c) 3 in 10  d) nil

<table>
<thead>
<tr>
<th>S NO.</th>
<th>QUESTION</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Do you develop fear when the patient faces gagging sensations?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Do you warn the patient before a procedure that he /she might face such a situation?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Does the patient who develops gagging cooperate with you the same as other patients?</td>
<td></td>
<td></td>
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<tr>
<td>4</td>
<td>If you face such situations are you blamed by the patient?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Do you show your tension at the situation on your patient?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Does the patient show any type of anger when they experience gag reflexes?</td>
<td></td>
<td></td>
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<tr>
<td>7</td>
<td>Do you handle your instruments in the most careful way even when you are tired or stressed out?</td>
<td></td>
<td></td>
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<tr>
<td>8</td>
<td>Before a procedure that may cause gag reflexes have you ever taken any precautions?</td>
<td></td>
<td></td>
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RESULTS:

<table>
<thead>
<tr>
<th>Q. No.</th>
<th>No. Of people agree with YES</th>
<th>No. Of people agree with NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>24</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>17</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>26</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>23</td>
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<tr>
<td>5</td>
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<td>2</td>
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<tr>
<td>6</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>7</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>30</td>
<td>0</td>
</tr>
</tbody>
</table>

Frequency of the dentist facing patients with gagging
(Question number)
DISCUSSION:

From the above results that are tabulated it is obvious that almost all dentists show the utmost care when they deal with patients. 80% of the dentists develop fear when the patient faces gagging sensations. Almost 57% of them warm the patient that they might face gag reflexes as it is better for the patient to know it before hand because if sudden reflex occurs the patient might develop more fear. 87% of them disagree with the fact that the patients who develop gag reflex cooperates the same as the other patients. 24% of them admit that they are often blamed by the patient for what they face. 93% of the dentists don’t show any kind of tension when the patient has gag reflex. 53% of the dentist say that the patients show anger on them when they face gagging. Most important of all is the careful handling of instruments and taking proper precautions which is done by all of the 30 dentists which proves that they are well trained. Gag reflex is very common in dentistry and there are many ways to overcome this. It depends upon the dentist and the patient to control the gagging faced by the patient.

The dentist must avoid careless handling of the instruments and must be very careful in the course of the treatment. The dentist must talk to the patient before treatment. Effective Communication can help bridge several problems that the patient has but feels shy to express. Asking questions and letting the patient answer is a good way of distracting them and to avoid chances of gagging. The position of the dentist also matters. Sitting at an upright position reduces the chances of triggering the gagging while impression is been taken. For severe gaggers, nitric oxide which has a significant effect on stopping gagging can be administered. Desensitisation can help for some. Placing a Q tip with salt on the tip of the patients tongue does good. (20) The dentist can also ask the patient to move their ankle and calf slightly off the chair not touching the chair, this is because flexing the calf muscles distract the patient (21,22)

It is impossible and not practical for a patient to sleep while performing procedures. Patients can also do a few things to overcome the gagging before their next visit to the dentist. The most important of all is that the person should avoid fear. The patient should not be afraid to drool. While swallowing the saliva with the impression material in the mouth, the patient tends to gag more. In this case saliva should be removed from the mouth by using a suction. Some patients have a sensitive gag reflex that they begin to gag even when they brush. These patients are advised to use a non foaming tooth paste. Such patients much continue brushing in the same place for about ten seconds so that they get trained to overcome this, even though it is unpleasant. This can be done so that they can overcomes gagging in the further visits they make to a dentist. Some of them might feel the reflexes more in the morning and it is advisable to get appointments from the dentists in the evening.

CONCLUSION:

Based on the results it is seen that gagging is one of the principal concerns for both patients and dentists. Further studies need to be done to know the awareness about the available technique of gag reflex among dentists and analyze the successful methods employed by various dentists to make the dental visits more comfortable for the patient as well as the dentist.
References: