

CASE REPORT

 **Tugce Kavaz**¹
 **Nuran Yanikoglu**²
 **Kenan Tastan**²

¹ Atatürk University Faculty of Dentistry-Department of Prosthodontics, Erzurum Turkey

²Atatürk University Medical School, Department of Family Medicine, Erzurum Turkey

Corresponding Author:

Kenan Tastan

*Atatürk University Medical School,
Department of Family Medicine,*

Erzurum Turkey

mail: ktastan2002@yahoo.com

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konuralptipdergi@duzce.edu.tr

konuralptipdergisi@gmail.com

www.konuralptipdergi.duzce.edu.tr

The Use of Hypnosis to Prevent the Gag Reflex in Dentistry: Two Case Reports

ABSTRACT

In dental practice, gagging can become a severe problem, and various methods are used for treatment of this problem. In this study, hypnotherapy was applied to two patients to whom dental procedures could not be carried out due to gagging. The first case was one in which it was thought that the patient would be unable to use dentures due to gagging, and, after hypnotherapy, it was ensured that she was able to use her dentures without any problem. The second case was a hypnotic-resistant case, and the impression procedure was carried out only after hypnotherapeutic suggestion. Our study revealed that hypnosis can be used successfully in the treatment of a gagging problem that is observed during dental practices and cannot be overcome.

Keywords: Gag Reflex, Dental Procedures, Hypnosis.

Diş Hekimliğinde Öğürme Refleksinin Önlenmesinde Hipnozun Kullanımı: İki Olgu Sunumu

ÖZET

Diş hekimliği uygulamalarında öğürme ciddi bir sorun haline gelebilir. Tedavide değişik yöntemler kullanılmaktadır. Bu çalışmada öğürme nedeniyle uygulamaları yapılamayan iki hastada hipnoterapi uygulanmıştır. Birinci olgu protezini öğürme nedeniyle kullanamayacağı düşünülen bir olgudur ve hipnoterapi sonrasında protezlerini sorunsuz bir şekilde kullanması sağlanmıştır. İkinci olgu hipnoza dirençli bir olgu olup ölçü alma işlemi ancak hipnoterapötik telkin sonucunda sağlanmıştır. Çalışmamız diş hekimliği uygulamaları sırasında görülen ve baş edilemeyen öğürme probleminin tedavisinde hipnoz uygulamasının başarı ile kullanılabileceğini göstermesi açısından önemlidir.

Anahtar Kelimeler: Öğürme Refleksi, Dental İşlemler, Hipnoz.

INTRODUCTION

Gagging can become a significant problem during taking impression for dental dentures, periapical radiography, the restoration of posterior teeth, and the use of full removable dentures. In dental applications, some precautions can be taken when gagging is at a level that prevents the procedure. Breathing exercises, sedation, acupuncture, hypnosis and general anesthesia practices in severe cases are recommended (1-2). Hypnosis is a traditional and complementary medicine method that can make medical procedures more comfortable by relieving patients in many areas (3). In this study, the results of hypnosis practice in two patients who experienced severe gagging problems during taking impression for the denture were presented.

CASES

CASE 1

A 65-year-old female patient who required that prosthetic procedures be performed on the maxillary jaw had tooth supported fixed dental prosthesis on her jaw, and the abutment teeth were mobile. It was observed that the patient experienced severe gagging during the examination. No psychodynamic cause was detected in the patient's anamnesis. The extraction of the teeth numbered 11,12,15,16,22,23,25, and 26, which were abutment teeth after the removal of our patient's bridge, was planned, and then an immediate denture was planned. Topical anesthetic was applied to the upper palate of our patient during taking an impression. The impression was taken after this short-term procedure. The complete palatal denture was planned for the patient with an insufficient tuber area; however, the patient seemed to have difficulty in wearing this denture in the long term. Hypnotherapy was planned to allow the patient to use the denture that would be made.

First Session: The patient was informed about hypnosis in order to relieve the patient's tension and anxiety, her questions about hypnosis were answered and she signed the informed consent form.

In the first session, the patient was put into a state of hypnosis. Suggestions of relaxation were given. The patient's anxiety was decreased by means of positive imagination suggestions, and the session was terminated by giving a post-hypnotic suggestion so that the patient would enter into a deeper state of hypnosis in a shorter time in the next hypnosis session.

Second Session: The patient was put under deep hypnosis by using a fast hypnosis technique. The patient was relieved, and her anxiety was decreased with the suggestions of relaxation by using the imagination method. The impression tray was placed in the mouth without any impression material and kept in the mouth for thirty seconds. The procedure was repeated five times, and the patient was observed not to gag. In the meantime,

therapeutically positive suggestions continued to be given to the patient.

A denture was prepared and delivered. In the follow-up, it was revealed that the patient had no denture-related gagging problems.

CASE 2

A 40-year-old female patient who was referred to our clinic planned to undergo implant treatment due to the lack of single tooth numbered 26. It was observed that even the contact of the impression tray on the palatal area of the patient during the implant-supported denture process triggered the gag reflex. This situation taking impression; therefore, hypnotherapy was recommended to the patient.

The patient was informed about hypnosis in order to relieve the patient's tension and anxiety, her questions about hypnosis were answered, and she signed the informed consent form.

In the first session, an attempt was made to put the patient into a state of hypnosis. However, it was determined that the patient was resistant. At this point, the authoritarian awakening method, which is applied in resistant cases, was employed (4). For this purpose, the patient was given the suggestion that she would overcome the gag reflex if she breathed loudly and held her breath for a certain period of time while gagging. Hypnotherapeutic suggestion was initiated due to the patient's resistance to the suggestion. Glove anesthesia was obtained in the patient with this practice. After hypoanesthesia was performed on the patient's right hand, she was asked to transfer this anesthesia to her throat, and the suggestion that she could not gag even though she wanted to gag was repeated many times. No gagging was observed when the impression procedure was initiated, and the fixed implant supported denture was completed successfully.

DISCUSSION

There may be many different reasons for the gagging problem. It is possible to examine them by listing them as follows: a central state caused by signals coming from the brain; a migraine or other types of headaches that can cause problems such as vomiting, nausea, and gagging; inner ear disorders that can cause balance problems (changes in the amount of fluid in the inner ear, an increase or decrease, and other conditions leading to balance problems); meningitis and other head traumas that cause the intracranial pressure to change and possibly lead to gagging or vomiting; tumors, concussions of the brain, and other diseases/conditions that affect and destabilize blood circulation or blood pressure; seasickness or motion sickness; diseases such as stomach ulcers and reflux disease that irritate the stomach; and habits or medications such as smoking, ibuprofen, aspirin, and anti-inflammatory drugs (2).

Although gagging is a common temporary problem during dental practices (taking an impression for dentures, periapical radiography images, restorations of the posterior teeth, the use of removable complete dentures, etc.), in some patients, it can occur at a level that prevents performing procedures in some patients.

The gag reflex can be frustrating for some individuals during dental treatments. This may be due to the physiological or psychological reasons of the reflex as well as fear of the dentist. Individuals with this condition are panicked, fearing that they will have difficulty in breathing or swallowing. Individuals with an overactive gag reflex can also have difficulty in brushing teeth (5).

If the denture bases cannot be tolerated in patients using dentures, liquids with topical anesthetic content (benzocaine (14%), butyl aminobenzoate, (2%), tetracaine hydrochloride 2%)) can be dropped on gauze pad and applied to the back of the arch. Making the post-dam area of the denture inclined can also reduce gagging problems and increase comfort (5).

Several treatment methods have been recommended in the case of the stimulation of severe gag reflex while working in the mouth. In the marble technique, the patient puts marbles in her mouth and keeps the marbles in her mouth except for sleeping and eating, and, after a while, she becomes unresponsive to the stimulus. In the button technique the patient keeps buttons or plastic discs in her mouth for two hours a day and keep a diary about it. If the patient is involved in the gagging process during the taking impression, she/he should be guided to take a slow and deep breath (6).

Considering that severe gagging is due to a psychogenic cause, therapy methods can be used.

The psychotherapy knowledge and training of dentists are generally inadequate (7).

One of the most effective therapy methods is hypnotherapy (2). Hypnotherapy is a traditional and complementary medicine method that can be applied by trained dentists.

In our study, the dentist who applied hypnotherapy in both cases had a certified hypnotherapy certificate from the Ministry of Health. Before hypnosis, suggestion-based techniques can be another approach for overcoming the gag reflex. Relaxation exercises can be offered to the patient several times a week, so it may be advisable for the patient to listen to relaxation procedures and a voice recording in which the muscles relax. The stimulation of the maxillary region, alveolar region, and palatal dome with a toothbrush, a spoon, mouthwash, or by other means can be recommended.

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In the stick technique, a broom handle is placed in front of the patient so that the hole is in the middle, and the patient is encouraged to look at that point until the impression process is over. As long as the patient is focused on that point, reportedly the gagging will disappear (this technique is a combination of distraction and suggestion) (8). If the denture base cannot be tolerated by the patient, the patient should practice at least five days a week, three times a day. The patient should be encouraged to keep the dentures in their mouths at intervals of thirty seconds for increasingly longer time periods until the patient's gag reflex is eliminated (5). At least four or five sessions may be required for the patient to overcome the gag reflex (7). The number of sessions was reduced in the patients with whom we performed hypnotherapy. This may be due to therapeutic suggestions given to the patient during hypnosis. Clarke, Stephen, & Persichetti (9) agree that the suggestions given in the gag reflex reduces the condition from day to day.

The first of our cases was an individual inclined to hypnosis. The score of Tasthan Suggestibility Scale was four point(10). For this reason, relaxation was provided only by relaxation patterns, the gagging problem was successfully treated with the positive imagination technique, and the denture was used without any problems.

Individuals have varying tendencies to hypnotic suggestions related to factors such as personality type, sociocultural background, age, gender, previous experiences of personal discoveries such as hypnosis, desire to be hypnotized, and personal attitude to hypnosis (11). Since the second case was resistant to hypnosis, the authoritarian awakening method was applied, but the practice of hypnotherapeutic suggestion was initiated due to the resistance of the patient, and success was achieved. The score of Tasthan Suggestibility Scale was three point.

If the appropriate information is obtained from the patient before hypnosis, past events can be recalled, and the cause of the problem can be revealed by applying regression hypnosis. In our cases, regression hypnosis was not needed.

In conclusion, our study indicates that hypnosis can be used successfully in the treatment of the gagging problem that is observed during dental practices and cannot be overcome.

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