35(1): 17-20 (2021)

# THE USE OF HYPNOSIS TO FACILITATE DENTAL TREATMENT FOR A PATIENT WITH A HYPERACTIVE GAG REFLEX: CASE REPORT

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# **ABSTRACT**

This case study demonstrates how hypnosis can be used effectively to treat a severe gag reflex, which was limiting the provision of dental treatment, and to facilitate oral hygiene at home. Clinical hypnosis was used alongside inhalational sedation in the dental surgery and instruction in self-hypnosis was given to assist the patient in cleaning his teeth and re-establish a daily toothbrushing routine. Due to the severity of the gag reflex the patient had been unable to brush his teeth at all for a number of months, resulting in pain, infection and dental disease. After an initial hypnosis session, the necessary dental treatment was completed under hypnosis and inhalational sedation. Following the treatment, the patient is now able to maintain his oral hygiene and access dental treatment as necessary.

Key words: Hypnosis; dentistry; sedation; gag reflex

### INTRODUCTION

The gag reflex is a protective reflex which stops unwanted entry of foreign objects into the mouth and oropharynx (Kumar et al., 2011). It is possible for a person to exhibit an underactive gag reflex or a hyperactive gag reflex, of varying degrees, as well as a normal gag reflex. The degree of severity of the gag reflex can also be situation dependant. Marked gag reflexes can be debilitating for the patient and can lead to distress and an avoidance of dental treatment. It can also result in a severe limitation to the ability of a person to receive dental treatment and in the clinician's ability to provide it (Dickinson et al., 2005).

A pronounced gag reflex can also lead to other issues such as poor oral hygiene, tooth decay and the development of dental phobia.

# PRESENTING PROBLEM

Tom, a 25-year-old male was referred to the Community Dental Service by his general dental practitioner (GDP). His GDP had been unable to examine his teeth and mouth properly due to a severe gag reflex, but had been able to determine that the patient had very poor oral hygiene and multiple decayed teeth. He considered that multiple fillings and extractions would be needed and considered that general anaesthetic would be necessary for this treatment.

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He was initially seen by my colleague who was also unable to conduct a full intra-oral examination but took an extra-oral radiograph, revealing many deep decayed lesions in the teeth. The patient was unable to tolerate intra-oral radiographic films. It was discussed with the patient as to whether he would consider clinical hypnosis to help him control his gag reflex well enough to clean his teeth at home and possibly allow a more thorough clinical examination of his mouth, although at that time it was still considered that general anaesthetic would be required for the majority of his dental treatment. The patient was also keen to save as many of his teeth as possible and was willing to try hypnosis and inhalational sedation in an attempt to avoid multiple extractions of teeth.

### RELEVANT MEDICAL HISTORY

Partially sighted
Benign brain tumour
Neurofibromatosis

### **ASSESSMENT**

At the initial assessment appointment Tom was visibly anxious as he came in and I reassured him that today was only an appointment for an assessment and discussion and that I wouldn't be doing any treatment. He said he was worried that he would gag if I tried to look in his mouth so I explained I would only do what he was comfortable with and stop immediately should he wish me to.

# ASSESSMENT OF THE GAG REFLEX

Tom's gag reflex was severe. He was unable to allow a dental mirror into his mouth without gagging. He also gagged if anything touched his lips or anywhere inside his mouth. He reported that he was unable to place a toothbrush into his mouth without triggering his gag reflex and as such he had been unable to brush his teeth for a number of months. He felt that his gag reflex was increasing in severity. The onset of the pronounced gag reflex had been gradual, over a number of years and he had not identified a cause for this.

### ASSESSMENT OF THE TEETH

After teaching him a simple a deep breathing technique, I was able to do a limited examination of Tom's teeth in short bursts, stopping as soon as he felt his gag reflex building. This also allowed him to feel in control of the situation. He could simply raise his hand and I would stop immediately.

We discussed possible treatment options including hypnosis and inhalational sedation, with the possibility of using both hypnosis and light inhalational sedation together (Whalley and Brooks 2009). Tom was very keen to try this. I also suggested trying the deep breathing technique I had taught him for tooth brushing at home.

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# DEEP BREATHING TECHNIQUE

Focus on breathing in and out slowly and deeply through your nose ... breathing all the way in ... and all the way out ... (said in time with the breaths, matching and pacing the breaths). Keep focusing on your breathing and when you're ready, take a deep breath in through your nose, open your mouth and while keeping your mouth open, exhale through your nose (the breaths are repeated a couple of times whist keeping the mouth open).

# **TREATMENT**

### SESSION 1: HYPNOSIS

Tom reported that the deep breathing technique had been very helpful, and he had been able to start brushing his teeth again. He still struggled to brush his back teeth but he was persevering and had certainly noticed an improvement in his ability to control his gag reflex.

I used a simple induction technique, asking him to close his eyes and once again focus on his breathing and the sound of my voice, deepening was done with progressive muscle relaxation (Simons et al., 2007). I then used visualization. As we had already discussed a warm, safe place where he would like to imagine himself sitting, I described this environment and once he felt ready (ideomotor signalling can be helpful in determining this), I asked him to visualize something which would ordinarily trigger his gag reflex but that instead of doing so, a deep breath in and out through his nose would let the gag reflex slip away and he could breathe through the experience, controlling the gag reflex in this way. I gave him a post-hypnotic suggestion that he would be able to control his gag reflex in this way whilst brushing his teeth from now on.

Following the hypnosis, we discussed self-hypnosis and he promised to practise this at home before our next appointment.

# SESSION 2: HYPNOSIS AND DENTAL TREATMENT

Tom was very pleased that he was now able to brush all his teeth without triggering his gag reflex and he was able to demonstrate this in the dental surgery. He had also been practising self-hypnosis at home and was keen to start dental treatment.

This time I used an eye-roll technique for induction with deepening and visualization as before.

It was possible to start treatment of his front teeth whilst under hypnosis, using the ultrasonic scaler, water and suction in his mouth to do so. He controlled his gag reflex well but we agreed that at the next appointment we should try inhalational sedation with hypnosis.

# SESSION 3 ONWARDS: INHALATIONAL SEDATION, HYPNOSIS AND DENTAL TREATMENT

Inhalational sedation with 25% nitrous oxide was used alongside hypnosis. Initially, I guided him through the induction and deepening but as the appointments progressed, he was often happy to use self-hypnosis. During this and subsequent appointments Tom was able to complete all the necessary dental treatment. This treatment included multiple large fillings, periodontal treatment and extractions of two molar teeth; one of which was the surgical extraction of a lower wisdom tooth, all under local anaesthetic and light inhalational sedation.

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### **FOLLOW UP**

Seven years after his initial treatment with hypnosis, Tom is still able to brush his teeth and access dental treatment, using his deep breathing technique and self-hypnosis to help him control his gag reflex if it is triggered. He no longer requires formal hypnosis for his dental examinations and treatment but occasionally inhalational sedation may be needed for more complex dental treatment.

# DISCUSSION

In this case much of the treatment undertaken was done under hypnosis, but hypnosis can also be used as a stand-alone treatment prior to the dental treatment for the control of an oversensitive gag reflex. Inhalational sedation also proved to be an effective tool, used alongside the hypnosis, to provide the longer and more complex aspects of the dental treatment.

The initial establishment of rapport with the patient is an important factor in the success of any treatment and pacing and leading can be an effective way of building rapport (Williamson, 2008). In this instance I did this by matching and pacing with language, voice and breathing in the initial assessment appointment.

Once rapport was established, I encouraged the patient to feel confident that he was in control of his environment. I introduced the treatment gradually, also employing systematic desensitization; starting with short bursts of treatment in the anterior part of the mouth and slowly progressing to longer procedures further back in the mouth. Finishing the treatment plan with the surgical removal of a lower wisdom tooth.

The use of visualization, post-hypnotic suggestion and self-hypnosis also proved effective in this case.

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