
MANAGING HYPERSENSITIVE GAG REFLEX USING INTEGRATED MANAGEMENT TECHNIQUES: A CASE STUDY

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ABSTRACT

The gag reflex is usually a normal, healthy defence mechanism that prevents foreign bodies from entering the trachea, pharynx, or larynx. However, the reflex can become abnormally sensitive. A hypersensitive gag reflex can prevent dentists from carrying out essential treatment with patients. The reflex can have psychogenic or somatogenic aetiology; however, it is most commonly a combination of both. The case study describes an integrated approach using a combination of traditional and complementary techniques. The patient presented with a tooth requiring restoration, but was unable to tolerate any dental instrument in his mouth. An integrated management approach involving hypnosis, breathing techniques, distraction, nitrous oxide, acupuncture, desensitizing trigger zones with topical anaesthetic, and systematic desensitization allowed treatment to be successfully carried out. Importantly, in addition to the successful completion of the treatment, the patient reported that the experience had instilled in him a greater confidence and sense of control about having future dental treatment.

Key words: dental hypnosis, gag reflex, acupuncture, inhalation sedation, topical anaesthetic, distraction, breathing

INTRODUCTION

As the body trembles and the footrest is stamped, large tears roll down from the eyes. The face of the victim takes on the hue of apoplectic purple and the patient gasps for breath, at the same time attempting to eject the intruders from his mouth and his insides with them. (Feintuch, 1954)

Written nearly 60 years ago, this vivid description will probably sound very familiar to many dentists today! It is easy to understand how gagging can compromise the quality of treatment, upset the patient, and frustrate the dentist. Despite advances in dentistry, many patients with strong gag reflexes continue to be just as difficult to treat now. Most dentists have little in the way of training in the few techniques that are available and often this leaves patients feeling embarrassed, anxious, and ultimately may prevent them from obtaining the treatment they need.

The gag reflex is usually a normal, healthy defence mechanism that prevents foreign bodies from entering the trachea, pharynx, or larynx. However, the reflex can become abnormally sensitive. Physical manifestations may be summarized as gagging, retching, vigorous tensing of the lips and circumoral muscles, defensive tongue, hyperventilation, excessive salivation, lacrimation, coughing, sweating, and occasionally vomiting.

Bassi et al. (2004) present a useful paper that reviews the literature on gagging from 1940 to 2002. They highlight the multifactorial aetiology of abnormal gag responses, suggesting that the four main contributing factors are: local and systemic disorder, physiological (anatomical), iatrogenic and psychological. They observe that there are two main categories of retching patients: somatogenic and psychogenic. However, it may be difficult to differentiate between the two groups, as a physical stimulus may provoke gagging of psychogenic origin. Milgrom et al. (1995) believe that the problem may be best viewed as a psycho-physiological reaction that has become over-learned. Given that the aetiology can be multifactorial, it is the suggestion of this author that often a multifactorial or integrated intervention is the best way of managing such cases, meaning that there is often much to consider.

Local and systemic disorders and physiological or anatomical factors can be identified by obtaining a detailed history and performing a thorough intra-oral examination. A full dental, medical, and social history would reveal any systemic factors, gastro-intestinal problems, breathing problems, and any possible psycho-social factors (e.g. sexual abuse).

SOMATOGENIC GAGGING

The term somatogenic describes gagging that is primarily induced by physical stimuli. Meeker and Magalee (1986) identify five intra-oral areas known to be 'trigger zones': palatoglossal and palatopharyngeal folds, base of tongue, palate, uvula, and posterior pharyngeal wall. Bartlett (1971) describes how conditions such as chronic nasal obstruction or sinusitis may increase the predisposition to gag. Poor technique on the part of the clinician may cause gagging in a patient who is not normally susceptible—for example, inappropriate positioning of suction tips and instruments, overloaded impression trays, or unstable, overextended or poorly retained prosthesis.

PSYCHOGENIC GAGGING

The term psychogenic describes gagging induced primarily by psychological stimuli. Heap and Aravind (2002) state that: 'Psychological contributions are represented by conditioned protective reflexes from earlier experiences or existing stresses and anxieties.' Classical conditioning can occur, for example, following an incident where gagging occurs as a result of an overloaded impression tray. A neutral stimulus, such as the sight of an impression tray, may then become associated with the gag response. For more information on psychogenic gagging see Saunders and Cameron (1997), who review the literature and present diagnostic criteria, treatment recommendations, and a clinical case.

It is essential for the clinician to be aware of the potential situation whereby a history of sexual abuse may be relevant in the aetiology of a sensitive gag response. It is also very important that the dentist avoids 'implanting' any suggestion that this may have been the case, as it may lead to a 'false memory' or 'false suspicion' of such an event.

This author suggests that it may be best practice simply to ask the patient who presents with a sensitive gag response: 'Can you recall the first time you had the strong gag reflex, or can you recall something specific happening in the past which may have caused it to develop or which made it particularly worse?' If the dentist suspects that there may be a history of abuse, for any other reason, or if anything during the session itself arises such suspicion, it would be appropriate for the dentist to consider a referral at this stage. In such a situation it would be prudent for the referring dentist simply to explain to the patient that they would best be treated by a medically trained colleague or psychologist. A careful referral explaining the concerns to a colleague with experience in tactfully managing cases where sexual abuse is suspected would then be the most appropriate action. It is of course important to remember that further appointments should still be made with the dentist with regards to getting the dental treatment completed.

CASE STUDY

VISIT 1

A male patient in his mid-40s presented to the clinic in pain, complaining of 'a broken tooth'. The initial consultation with my colleague Dr Jamie Newlands revealed that the patient had last attended a dentist approximately ten years previously. From the symptoms he described it appeared that he had reversible pulpitis relating to the upper right first molar, which had a large amalgam restoration. He was conscious of having had a 'food trap' and cavity on the tooth for some time. He said that he had previously always been 'knocked out' (with intravenous sedation), even for a check-up, due to his anxiety and strong gag reflex. The extent of the reflex became apparent when a mirror was moved towards the patient's mouth. When the mirror was approximately one foot away, the patient started to retch. His gagging severity index (GSI), as described by Dickinson and Fiske (2005), was therefore recorded as a '5' (see Figure 1).

Figure 1. Gagging severity index (GSI)

1. *Normal gagging reflex.* Very mild, occasional, and controlled by the patient.
2. *Mild gagging.* Control is required by the patient with reassurance from the dental team.
3. *Moderate gagging.* Consistent and limits treatment options. Gagging prevention measures are usually required.
4. *Severe gagging.* Gagging occurs with all forms of treatment including simple visual examination. Treatment is limited.
5. *Very severe gagging.* Affecting patient behaviour and dental attendance and making treatment impossible without specific treatment for control of gagging.

Source: Dickinson & Fiske (2005)

To help assess the patient's needs and achieve a visual reference of the dental situation, he was asked to retract his own lip so that a photograph could be taken, as shown in Figure 2.



Figure 2. Photograph showing defective amalgam restoration on the upper right first molar tooth (tooth 16/U6)

The treatment options were discussed given the apparently vital nature of the pulp (nerve), the already heavily restored tooth, and the patient's likely inability to tolerate rubber dam. It was decided that following the history of food trapping, the tooth would best be restored with a ceramic inlay. It was elected to make the inlay in-house using our own CEREC 3D system. Following years of requiring intravenous sedation for dental treatment and the inconvenience this caused, the patient wanted an alternative so that he could become a 'normal patient' again. After discussion with the patient about his goals and the aims of the treatment in his case, an appointment was made for a consultation regarding his gag reflex.

VISIT 2

It was explained at the consultation that any intervention would be considered successful if dental treatment could be effectively carried out with minimum activation of the gag response (i.e. to achieve a Grade II on the gagging prevention index (GPI), as shown in Figure 3).

Figure 3. Gagingpreventio index (GPI)

Grade I. Gagging reflex obtunded. Proposed treatment was completely successful.

Grade II. Partial control. Proposed treatment was possible but occasional gagging occurred.

Grade III. Partial control. Proposed treatment was part completed or alternative treatment carried out.

Grade IV. Inadequate control. Some treatment carried out, but only very simple procedures.

Grade V. No control. Gag reflex was so severe that even simple treatment was not possible.

Source: Dickinson & Fiske (2005)

It was made clear that the realistic aim of the intervention was to reduce the gag response sufficiently to allow the patient to receive dental treatment with minimum anxiety or stress, rather than to expect to remove it completely. It is worth noting that patients often feel very embarrassed about their gagging problem. By helping them to understand the nature of gagging some of this embarrassment and anxiety may be removed or reduced.

The patient in this case was informed that the problem was quite common and that there were techniques available that would help. It was emphasized that dentists encounter the problem on a regular basis and that should he experience the reflex at any time, he should feel comfortable that he is in the company of professionals who are used to helping many patients with the same problem. Following assessment of the gag reflex and discussion of the history of the problem, it was confirmed that the patient had a current GSI of 5. The main trigger areas seemed to be the lateral borders of the tongue, suggesting some somatogenic aetiology.

The patient described, however, that he was able to use cutlery and toothbrush without incident, and this—combined with stimulation of the reflex with visual stimuli—suggested significant psychogenic aetiology. Hypnosis was discussed with the patient (Gow, 2008a). The patient was interested in exploring this option further and a brief assessment confirmed that the patient was a suitable candidate for a hypnotic intervention. It was explained that there were a number of techniques available for reducing the reflex, which would also be discussed at the next visit and used as appropriate. The patient stated that he would be interested in any technique that would help and allow him to remain fully conscious and aware during his treatment.

VISIT 3

Prior to the hypnotic intervention at this visit, a 'positive anchor' was set up (Gow, 2011: 145). This anchor (associating positive feelings with touching the middle finger and thumb on the non-dominant hand) was important, as it ensured that the patient could be safely brought out of trance at any point during the session. A rapid induction technique was used, followed by basic deepening and ego-strengthening techniques (Gow, 2011: 147–151). Robb and Crothers (1996) describe that the permanent reduction of the gag reflex

can be achieved using three main hypnotic approaches: (1) uncovering circumstances that caused the reflex to develop, (2) actively engaging the patient in the treatment, and (3) using hypnosis as an adjunct to desensitization. The hypnotic intervention in this case used all three of these approaches. Standard safeguards, ethical blocks, and reversal techniques were given at the end of the session (Gow, 2011: 154).

Uncovering circumstances that caused the reflex to develop

This can be a very useful technique and often reveals that a previous event has led to the current inappropriately strong gag reflex. Please note: care must be taken when using techniques to uncover the circumstances that caused the reflex to develop, as it is possible that the patient may have traumatic memories of (for example) sexual abuse, which may arise during the session. As previously described, should this become apparent, or if the dentist is suspicious that this may be the case, a tactful referral to a suitably trained colleague would be the most appropriate action.

After setting up ideomotor signalling (which allows unconscious responses to be recorded for specific questions), Ewin's very useful hypno-analysis technique COMPISS was used to safely investigate and uncover any potential causes of the abnormal gag reflex (Ewin & Eimer, 2006: 253–263). Given the scope of this paper, a full explanation of the technique would be too lengthy. It essentially allows the clinician to investigate if the aetiology of the problem has anything to do with conflict, organ language, motivation (secondary gain), previous experience, identification, self-punishment, or suggestion. Often more than one factor will be involved and each must be addressed in order for there to be resolution of the problem. In this case, the technique uncovered that there had been a previous experience when the patient had a gagging episode as a child (at about 7 years old), when an impression was taken by a female school dentist. It was also confirmed that there were no other significant previous experiences. Importantly, the COMPISS technique also highlighted that 'suggestion' was significant as the dentist made a specific negative comment immediately after the gagging incident; she said that he was 'wasting her time'. Using COMPISS, it was identified that this comment was a significant factor in his continuing recurrence of the strong gag reflex during dental treatment. The negative comment was challenged and then he was able, as an adult, to safely travel back and re-evaluate what happened on that day to the child. The 'adult' was able to comfort the 'child' in the imagined scene and reassure the child that he (the adult) was living proof that he (the child) would survive the ordeal and ultimately be alright.

The 'adult' was also then able to explain to the dentist why her actions and comments were inappropriate that day, and make her realize how these made the 'child' feel (something that, in reality, the child was obviously unable to do at the time). This was important as it gave the patient back a sense of control (Gow, 2011: 153). The 'adult' was then able to travel back to the present day, with the knowledge that the 'child' was reassured and feeling better about the situation. The patient appreciated that it was impossible to change his past, but realized that it was possible to change how he felt about the past.

Actively engaging patient in treatment

Once the circumstances that had caused the reflex to develop had been uncovered and addressed, it was then possible, as Robb and Crothers (1996) mention, to 'actively engage the patient in the treatment'.

This was done by encouraging the patient to see the benefits of overcoming the problem and being able to have treatment (e.g. improved health, appearance, increase in comfort). The patient could then view overcoming the problem as a positive achievement. In this case, a variation of Graham's (2001) 'double mirrors' future pacing exercise allowed the patient to see and then experience what it would feel like in the future having overcome his problem and having had his dental treatment. These positive feelings were anchored and he was taught that he could re-access these positive feelings at any time in the future. A further 'future rehearsal' technique was used, whereby the patient was able to visualize watching a DVD of himself having his dental treatment carried out comfortably and easily (Gow, 2011: 153). He was able to watch the DVD to the end, seeing himself getting up from the dental chair, looking happy and confident, having successfully completed his treatment. Using an anchoring technique, the patient was able to bring back all the positive feelings from the future to the present.

Hypnosis as an adjunct to desensitization

Robb and Crothers (1996) describe that hypnotic techniques can also be used as an 'adjunct to desensitisation'. This can allow the patient to control the reflex and remain calm during dental treatment. This approach is the basis of the recommendations of Barsby (1994, 1997a). Zach (1989) described a hypnosis case in which he helped a patient to control his gag response using an imaginary switch. In this case the patient was able to visualize that his gag reflex could be controlled by an imagined dial (the design and specifics of which are, importantly, chosen by the patient. The dial can be a dimmer light switch, a shower dial reducing temperature, a volume control, a speedometer, a thermometer, or simple number dial). It is the opinion of this author that a dial is more appropriate than a simple on/off switch, as it allows some level of fine-tuning and control. This is important in the case of gagging, as it is actually useful to have some gag response to prevent aspiration of foreign objects. In this case, the patient stated that his dial was a 'number dial', which was currently set at 9/10 (with 0 representing no gagging and 10 maximum gagging). The patient said that he wished the dial to be reduced to the 3/10 it was before the experience he'd had as a child with the school dentist. It was emphasized that as it is important to maintain some gag response as a useful defence mechanism, 3/10 would be appropriate. The patient was then able to visualize gradually turning down the dial from a '9' to a '3'. He was also reassured that he could control the dial during any future dental treatment. At the end of the session the patient commented that he found this technique especially useful. Standard safeguards and ethical blocks were used before the hypnosis session was brought to an end.

The session lasted approximately one hour, although the patient believed it to have been much shorter. The patient was very pleased with how the session went and gave very positive feedback. Following the session the patient was able to tolerate a mirror in his mouth for a short time, but had a minor gag response upon touching the 'trigger zone' of the lateral border of the tongue. He was congratulated on the fact that the mirror was successfully in his mouth for a short time. It was emphasized that it can take time for the

hypnotic techniques used to process and fully take effect, and that his control of the gag reflex would increase as he rehearsed the hypnosis techniques he had learned at home while performing the following desensitization exercises.

Additional 'integrated' interventions

As the patient presented with a score of '5' in the Dickinson and Fiske (2005) gagging severity index, and as he had expressed specific interest in them at the previous visit, it was deemed to be in his best interests to use any and all additional techniques available that he showed an interest in to allow him to achieve his goal of being conscious during his dental treatment. It was stressed that as this would be a combined approach, these techniques would work synergistically and thus actually be even more effective than if used individually. In addition to hypnosis, the following techniques were therefore discussed in greater detail.

Systematic desensitization. Systematic desensitization can be a very useful technique to reverse the conditioning process (Morse et al., 1984). The principle is that the previously adverse stimulus is gradually introduced and increased, in stages, with the patient as relaxed and as comfortable as possible. The intensity, duration, and frequency are gradually increased. A toothbrush, X-ray, impression tray, marbles (Singer, 1973), acrylic discs (Barsby, 1994), buttons, and training devices are all examples of items that have been used in the literature.

In this case, the patient was given a disposable mirror and suction tube to practise with at home while using his self-hypnosis and breathing techniques (which will be detailed below). He was instructed to build up gradually the amount of time these instruments were in his mouth each day, by a few seconds. It is important that this exercise is gradual and reinforces positive exposure to the instruments. This is the essence of the 'errorless learning' technique described by Bassi et al. (2004). If the patient were encouraged to keep the instruments in for as long as he could manage, this would ultimately result in repeated occurrence of gagging, and would therefore reinforce the conditioned response. The patient is asked to determine how long they feel they are currently capable of keeping the instruments in their mouth (e.g. ten seconds). On the first day, they are encouraged to repeat the exercise a number of times and, using the breathing/hypnosis techniques, place the instruments for a maximum of eight seconds (a timer can be set if this is helpful). The following day, the time should be increased to nine seconds. This time should then be increased gradually each day by an agreed increment. If the patient experiences any difficulty, he must revert to the previous day's time (at which he had success) before moving forward again by one increment the following day. It is vital that the progress is gradual and that as many 'positive' experiences as possible are achieved. The patient should keep a diary to bring to the next appointment for discussion with the dentist. This technique is also useful for desensitizing a patient who has intolerance to an appliance or prosthesis that is otherwise deemed to be of suitable design and dimensions.

Breathing techniques. It was discussed again that gagging is a reflex response involving the oesophagus, while breathing involves the trachea. Just as it is impossible for an adult to swallow and breathe at the same time, it is impossible to breathe and gag at the same time. It was explained that a valve closes over the oesophagus while breathing, making gagging impossible. The patient was instructed to practise taking long deep breaths in, and then fast

forced breaths out between visits, especially while doing his desensitization exercises. It was emphasized that there should be no pause between expiration and inspiration. Barsby (1997b) has described the control of hyperventilation and gagging by teaching patients breathing techniques.

The patient was taught to swallow with his mouth open and teeth apart while breathing through his nose. He was encouraged to practise this several times per day while using self-hypnosis between visits (Wilks & Marks, 1983). The patient was also encouraged to practise holding water at the back of the mouth while breathing through the nose—again while using self-hypnosis. This technique was therefore an integration of hypnosis, breathing techniques, and desensitization.

Acupuncture. Acupuncture has been demonstrated to have an effect on the gag response (Fiske & Dickinson, 2001). In this case, acupuncture point CV-24 was deemed to be the most appropriate (see Figure 4). Acupressure can also be effective. Another recent case referred was of a patient unable to tolerate brushing her teeth. This was quickly overcome by her simply pressing on point CV-24 (the centre of her chin) with her thumb while brushing.

Nitrous oxide inhalation sedation. It is well established that inhalation sedation may effectively reduce the gag response and anxiety. Following discussion, the patient stated again that he did not wish to have intravenous sedation, but was happy to have inhalation sedation during active treatment. As hypnosis was to be used during the treatment session as well, it is worthy to note that Whalley and Brooks (2008) conclude in their study that nitrous oxide actually increases imaginative suggestibility and imaginative ability.

Desensitizing trigger zones with topical anaesthetic. Following discussion, the patient was also keen that a topical anaesthetic pump spray be used to desensitize the lateral borders of his tongue, which he had identified as the main 'trigger zone' for his hypersensitive gag reflex. Please note that this technique may not be suitable for all patients. It may cause distress to some as it can create an altered sensation when swallowing.

Distraction techniques. Corah et al. (1979) describe several basic distraction techniques in managing hypersensitive gag reflexes. A very useful distraction technique, which was used in this case, is the 'straight left leg technique'. The patient is instructed to raise their non-dominant (in this case left) leg six inches from the dental chair. They are told that they must keep the leg raised to prevent the gag response (Krol, 1963). Other commonly cited distraction techniques involve placing salt on the tongue or staring at a spot on the wall, the ceiling, or a stick, for example.

VISIT 4

Following a brief discussion about the how the session would progress, an acupuncture needle was inserted at point CV-24. The acupuncture needle remained in-situ for the duration of the treatment (see Figure 4). The inhalation sedation was then titrated to the patient's responses, with a mix of 50:50 nitrous oxide and oxygen administered.



Figure 4. Acupuncture point CV-24

Following a wait of several minutes to ensure a stable level of sedation, a rapid hypnotic induction technique was employed (Figure 5). Topical anaesthetic spray was then used to desensitize potential trigger zones on the lateral borders of the tongue.



Figure 5. Integrated approach to managing gag reflex: hypnosis, acupuncture and nitrous oxide

The hypnotic techniques used included basic relaxation and ego-strengthening techniques, with the patient being able to relax in his 'special place' while visualizing the dial previously described, over which he was told he would have complete control throughout the session. The patient was reminded to use the breathing techniques he had previously learned and rehearsed. He was reassured that any time he needed to have a break, or wanted to swallow, he could raise his left hand (thus avoiding bumping the dentist, who was on his right) as a stop signal, indicating to the dentist and nurse to remove all instruments, fingers, and so on from his mouth. Immediately prior to local anaesthetic being infiltrated

in the region of the tooth to be restored, the patient was asked to use the 'straight leg technique' during the injection. This technique was repeated each time any instruments or the operator's fingers were inside the patient's mouth.

The existing amalgam and secondary caries were removed, revealing a very deep cavity. The patient coped well with this part of the procedure, with minimal interruptions using the stop signal or activation of the gag response. The patient tolerated a small impression with no incident. Once the dental treatment had been completed for the session, the acupuncture needle was removed. The patient was praised for how well the procedure had gone and was given post-hypnotic suggestions so he would find the treatment at the next visit even easier. One hundred per cent oxygen was administered for five minutes during safeguards and ethical blocks, and hypnosis was 'reversed'. The patient was delighted with the success of the session and an appointment was arranged for him to return to have the restoration fitted.

VISIT 5

The acupuncture, hypnosis, inhalation sedation, topical anaesthetic spray, distraction, and breathing techniques detailed in the fourth visit were all repeated. The temporary restoration was removed and the CEREC restoration was trial seated in-situ. The marginal fit was excellent and cementation was carried out, as shown in Figure 6. Following reversal of the hypnosis, inhalation sedation, and acupuncture, the patient was able to tolerate a final examination of the restoration with a dental mirror with no incidence of gagging. The patient was delighted with the outcome of the treatment.



Figure 6. Final CEREC restoration following cementation

For more clinical photographs and details of the clinical dental procedures in this case see Gow and Newlands (2009).

CONCLUSIONS

Using hypnosis, acupuncture, inhalation sedation, topical anaesthetic spray, distraction, and breathing techniques, the patient was able to tolerate dental treatment while conscious for the first time since being a child. He was delighted with the progress that he had made and was especially pleased that he had not lost a day from his busy schedule because of the after-effects of intravenous sedation. There is a growing reputation for the use of hypnosis in the management of the inappropriate gag response, with several case reports backing up its use (Eli & Kleinhauz 1985; Zach 1989; Noble 2002). It is likely that this success is due, at least in part, to possible psychogenic components of the aetiology. There are, however, very few controlled studies reporting on the efficacy of hypnosis in treating patients with problems with gagging. Walker (1998) concluded that hypnosis can be a valuable adjunct in the treatment of gagging, with 56% success in complete eradication and an additional 32% achieving partial success. The success rate of either complete or partial success was therefore 88% out of a total of 31 treated patients.

Hypnosis may be especially beneficial when used, as was the case here, in conjunction with other techniques such as inhalation sedation, acupuncture, topical anaesthetic sprays, relaxation, distraction, and breathing techniques. In fact, Barsby (1994) stressed that: 'Hypnosis can provide the clinician with a set of techniques that may be used to augment or facilitate a particular course of treatment.' It is possible that this case may have been successfully managed with a different combination of techniques; however, as the patient was keen to utilize an integrated approach this seemed the most appropriate course to take. In fact, experience has shown in similar cases that this integrated approach continues to have a high success rate, with no 'failure' yet being encountered. One similar case allowed a retired dentist to tolerate dental treatment for the first time in several decades. Another recent case using the COMPISS technique, identified that the patient had 'identified' with the gagging experienced by her disabled daughter during mealtimes.

Obviously the combined approach in this case makes it very difficult to assess exactly which aspects of the intervention had the biggest impact on the successful outcome; but as this is a clinical case, all that is really important is that a successful outcome was facilitated. It is certainly likely that having a suitably long appointment time is significant, as the clinician feels under less pressure.

There is a real need for more controlled research to determine the effects of each of the approaches described in this case and to determine if, as is suspected, the use of techniques in combination actually creates a synergistic effect in managing what is often a very complex and difficult condition. Certainly, advances in technology such as CEREC 3D have provided new ways in managing difficult restorative cases.

Despite the patient presenting with a GSI of the maximum of 5, a Grade II was achieved in the GPI. There were only a couple of minor gagging incidences during the dental treatment visits and these were short in duration and quickly controlled. To put these minor gagging incidences into perspective, they were comparable to the type of incidences witnessed by most dentists almost on a daily basis with patients who have no specific issue with sensitive gag responses, and were most likely caused by the usual iatrogenic culprits of a build-up of water, inappropriate positioning of the suction tip, and so on. In this case, the patient received an integrated approach tailored specifically to his requirements that addressed his individual concerns and needs. This involved using several integrated ap-

proaches which successfully allowed him to tolerate dental treatment for the first time in many years. Some of the techniques described here have a background in hypnosis but, in fact, can be applied without any need for 'formal' hypnosis induction (see Gow, 2008b).

Following a description of hypnosis in the control of gagging, Stolzenberg (1961) identified this 50 years ago, concluding that:

The practitioner who is competently trained in hypnosis will find that there is a diminished need for the use of hypnosis per se, with most of his patients. His understanding of the psychodynamics will aid immeasurably in establishing rapport with his patients, and he will develop an excellent patient–dentist relationship. His semantics will be a vocabulary of positive words that will not trigger off negative reactions in his patients. As a rule, the dentist who has been exposed to hypnosis indoctrination usually displays kindness and understanding, and treats his patients with tender loving care.

PATIENT COMMENTS

Ever since childhood I have had a severe gag reflex, which has made dental treatment almost impossible. For many years I avoided going to the dentist at all. Recently, one of my teeth broke and I realized that I needed to get treatment for it. I knew I had to find a dentist who would be happy treating someone with a gagging problem. I looked on the internet for a suitable dentist and came across the Berkeley Clinic. The facilities and standard of the clinic were impressive. I went along and after a couple of sessions the tooth was repaired.

Dr Mike Gow used several techniques in combination—hypnosis, nitrous oxide, acupuncture—which kept the gagging well under control. I was given a treatment plan designed to deal with my specific problems.

I appreciate the way Mike made me feel less like a patient being told what to do, and more like a partner in the process. I felt like I was in control of things at all times. Plenty of time was allocated for the treatment sessions.

I was nervous at first but I soon felt very comfortable about going along. If any problems do come up in future I know that I will be quite relaxed about going back for more treatment. Dr Mike Gow, Dr Jamie Newlands, and the team at the clinic gave me a very positive experience – thank you.

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