

Michael A Gow describes the potential of suggestions and hypnosis to address problems associated with post-extraction bleeding, pain and patient anxiety

## Dental hypnosis and suggestions in post-extraction bleeding control

Even without formal hypnotic induction, a surprising number of patients can be in a highly suggestible state while in the dental chair. Simple suggestions and instructions given correctly by any dentist – without the use of formal hypnotic induction techniques – can, in my experience, have a significant influence on many factors including anxiety management, gagging control, smoking cessation, improvement in oral hygiene, etc. Following exodontia, such suggestions can even influence postoperative pain experience, bleeding control and indeed the patient's concerns about these issues. My own introduction to post extraction bleeding and pain control with indirect suggestions and techniques was by Dr James Auld, who will be teaching at a workshop taking place in Glasgow on 17 June (see Diary Dates on page 54).

I have found that only the genuine 'emergency' patient will tend to return with problems if appropriate simple suggestions are given. Dentists can and do unwittingly encourage patients to return by suggesting that they 'contact the surgery if there are any problems with bleeding or pain or if you are at all worried'. Given this suggestion, a patient's anxiety may increase, which in itself may actually increase the likelihood of continued postoperative bleeding. They may also 'focus in' on the extraction site and worry about any minor painful sensations or bleeding from the site. If the same postoperative information is given with appropriate suggestions, your patient will contact the surgery only if there is a genuine emergency.

When giving postoperative instructions, you will find that relatively few patients return with concerns if you include something along the lines of: "You can be pleasantly surprised at how comfortable it can be as the tooth socket heals rapidly in a normal manner. There may, of course, be some gentle bleeding from the extraction site. This gentle bleeding is natural and you will be able to tell that it is the correct amount of bleeding to allow the healing process to continue. Similarly there may be some 'healing sensations' which can let you know that the healing

processes are underway. Obviously, as you would expect, those sensations reduce as the healing processes progress naturally over the next few hours, days and weeks." Given similar suggestions following her extraction, one patient recently commented on review that "I am surprised by how quickly it is healing and there has been no discomfort or pain" (Gow 2006).

### Bleeding control

Abnormalities in bleeding following dental extraction can take the form of too much (haemorrhaging), or too little blood (dry socket/alveolar osteitis). Obviously, all usual care and advice must be given by the dentist to avoid these problems and, similarly, all appropriate care and advice must be given in their management should they occur. It has long been believed, however, that it may be possible for a dentist to influence bleeding following an extraction by hypnotic suggestion. This article considers some of the literature relating to control of bleeding in dentistry using hypnosis, and outlines some simple suggestions which may be utilised in day to day dental practice.

### Brief literature review

Early reports of surgery using hypnosis as the method of analgesia often noted that there seemed to be little bleeding and that healing was rapid. As early as 1921, Tuckey found that the smaller arteries and capillaries were "almost invariably contracted in hypnosis, so that even deep wounds tended to produce little or no haemorrhage". Stolzenberg (1955) reported on a 14-year-old male patient with an impacted mandibular left first molar. Hypnoanesthesia and suggestions to stop bleeding and salivating were reportedly successfully employed. Marcuse and Phipps (1956) report on a demonstration of hypnosis for dental extractions, including anaesthesia and bleeding control, and describe successful results with two previously untrained patients with only three-minute inductions.

Research by Garbowski (1971) explored the possibility that hypnotically influencing the

mechanical contraction and expansion of small blood vessels might account for effects observed clinically. She trained 38 subjects in hypnosis two to three times per week for four weeks using suggestions of warmth and coldness. Her conclusion was that: "following suggestions of coldness, capillaries appeared to narrow, while after suggestions of warmth they appeared to dilate". Lucas (1975) describes using hypnosis in haemophiliacs undergoing oral surgery procedures, something he had done since 1959. Previously, Lucas et al. (1962) (also cited in Heap & Dryden 2001, pp158-9) reported on the extraction of 114 teeth in 24 haemophilic patients, with none experiencing abnormal bleeding. Hypnotic suggestions of reduced bleeding were used in combination with protective splints and the critical packing of sockets.

Lucas (1975) states that simple suggestions of bleeding control are often not enough for the patient to carry out the suggestion, and he stresses the importance of relating any suggestion to a previous experience. "Regarding control of capillary bleeding, the idea of severe cold, vasoconstriction, and numbness [around the surgical area] must be suggested". However, he stresses that the paper does not imply that hypnosis alone stops bleeding in haemophiliacs following exodontias, but that it is an adjunct used mainly to control anxiety. The influence of emotional stress on the onset and control of bleeding episodes is well known. Anxiety may trigger or complicate an existing hemorrhagic episode in a haemophilic undergoing oral surgery. Hypnosis is an excellent adjunct to control anxiety, and can help reduce any haemorrhaging during and after the surgery. Lucas concludes that time spent on hypnotic intervention is saved during the postoperative period by a reduction of the chances of secondary postoperative bleeding, therefore reducing hospital stay and replacement therapy.

Chaves et al. (1979) report on a study which used its subjects as its own controls. Nine subjects who required bilaterally symmetrical exodontia participated, with hyp-

nosis and suggestions used for surgery on one side of the mouth but not on the other. Hypnosis with suggestions resulted in a mean reduction in blood loss of 7.7 ml, about a 65 per cent reduction. There did not seem to be any relationship between success in reducing blood loss and hypnotisability.

Interestingly, Bennett and Benson (1986) describe how spinal surgery patients who were given a preoperative suggestion to decrease blood loss at surgery had significantly less blood loss than either a relaxation or a control group. This suggests that the effects of the hypnosis are not merely a consequence of relaxation. A study by Enqvist et al. (1995) assumed that emotional factors may influence not only recovery but also blood loss and blood pressure in maxillofacial surgery patients, where the surgery was performed under general anaesthesia. Eighteen patients were administered a hypnosis tape containing preoperative therapeutic suggestions, 18 were administered hypnosis tapes containing pre- and perioperative suggestions, and 24 were administered a hypnosis tape containing perioperative suggestions only. The patients who received taped suggestions were compared with a group of matched control patients. Those who received preoperative suggestions exhibited a 30 per cent reduction in blood loss. A 26 per cent reduction in blood loss was shown in the group of patients receiving pre- and perioperative suggestions, and the group receiving perioperative suggestions only showed a nine per cent reduction in blood loss.

### Some simple suggestions

The simple suggestions and techniques outlined below may be given with or without formal hypnotic induction.

To control haemorrhaging following extraction:

- "Visualise the blood in the extraction socket as water coming from a tap which could be turned off."
- "Visualise constricting and collapsing blood vessels in the involved area for as long as necessary"