



CPD4dentalnurses

YOUR FUTURE IN YOUR HANDS

Using Complementary Therapies in Dentistry

Aims: To review the complementary therapies of acupuncture, acupressure and hypnosis and their potential benefit to the patient in dentistry.

Objectives: On completion of this verifiable CPD article the participant will be able to demonstrate, through the completion of a questionnaire, the ability to:

- Demonstrate knowledge of three different complementary therapies that can be used in dentistry.
- Identify some of the uses of these complementary therapies in dentistry.
- Identify some of the limitations of these complementary therapies in dentistry.

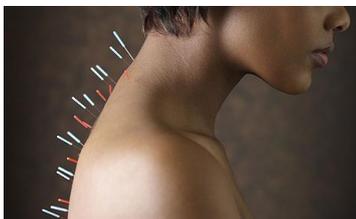
Introduction

Complementary and alternative medicine has been defined by the Cochrane Collaboration as "a broad domain of healing resources that encompasses all health systems, modalities, and practices and their accompanying theories and beliefs". Complementary medicine is a term that encompasses both major therapies such as acupuncture, chiropractic, herbal medicine, homeopathy, and less invasive therapies such as massage and reflexology.¹

This article will review the complementary therapies of acupuncture, acupressure and hypnosis and their potential benefit to the patient in dentistry.

Acupuncture in Dentistry

Acupuncture originated in China over 3000 years ago.² Like many complementary therapies, it is uncertain how acupuncture works but there are many theories. One of the most popular theories is that acupuncture closes gates preventing the transmission of nerve impulses and resultant pain.¹ Acupuncture is a skill which requires training and should only be practiced by someone who has undergone postgraduate training and is competent to practice it.



Acupuncture is defined as ' the insertion of a solid needle into any part of the human body for disease prevention, therapy or maintenance of health.' There are a number of different methods of acupuncture and they all rely on this basic principle.² Most people are familiar with the traditional technique where needles are inserted through the skin at a number of sites, sometimes the sites are away from the area that is being treated.²

Insertion of the needles influences the physiological functioning of the body. Six types of needles are commonly used today which vary in length, width, and shape of head. They are disposable. Depending on the problem, the needles are inserted at different specific acupuncture points at different angles and are then moved using a number of techniques.¹

Conditions Suitable for treatment with acupuncture

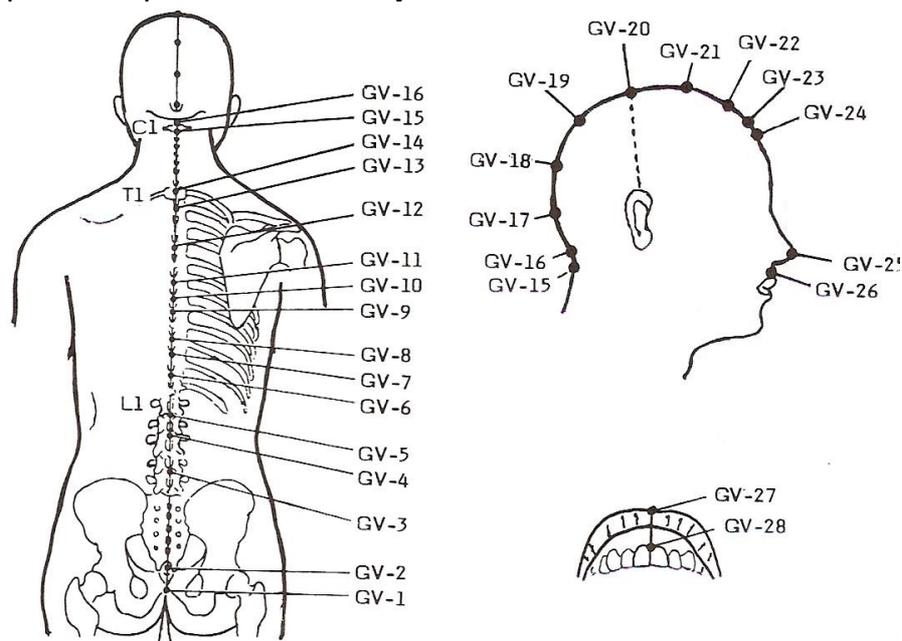
- ✓ Pain Management - One of the primary applications of acupuncture in dentistry is pain management. It can help alleviate pain associated with various dental procedures such as tooth extractions, root canal treatments, and surgery. By stimulating specific acupuncture points, acupuncture may activate the body's natural pain-relieving mechanisms, leading to reduced discomfort during and after dental procedures.
- ✓ Prominent gag reflex
- ✓ Temporomandibular Joint (TMJ) Pain- Acupuncture may help relax the muscles around the jaw and reduce inflammation, thereby improving TMJ symptoms.
- ✓ Dental anxiety and stress reduction - Dental anxiety is a common problem among patients, often leading to avoidance of dental visits. Acupuncture can help reduce anxiety and stress before dental procedures by promoting relaxation and releasing endorphins, which are natural mood elevators.
- ✓ Facial pain – pain management.
- ✓ Muscle spasm - pain management.
- ✓ Chronic headache- pain management.
- ✓ Migraine - pain management.
- ✓ Trigeminal and other neuralgias - pain management.
- ✓ Rhinitis
- ✓ Sinusitis
- ✓ Xerostomia - Acupuncture may stimulate saliva production, making it beneficial for patients experiencing dry mouth (xerostomia) due to medications, radiation therapy, or other factors. Improved saliva flow can help

alleviate discomfort and reduce the risk of dental complications associated with dry mouth, such as tooth decay and periodontal disease.

- ✓ Oral dysaesthesias
- ✓ Post operative pain
- ✓ Management of Dental Phobia - Acupuncture techniques can be incorporated into holistic approaches to manage dental phobia and improve the overall dental experience for patients who fear dental treatments. By addressing both physical and psychological aspects of anxiety, acupuncture may help patients feel more comfortable and at ease during dental visits.
- ✓ Adaption to new dentures
- ✓ Smoking cessation³

Using Acupuncture

Dental anxiety and temporomandibular joint disorders commonly present problems in the dental surgery and acupuncture can be effective in the management of both problems. Mild to moderate anxiety may be managed with needles in the site GV20 (Slightly to the back of the centre of the head) and positioning four supplementary needles near to this one. The following diagram shows the position of some of the various acupuncture points on the body.³



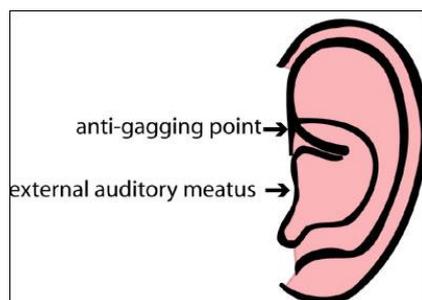
Acupuncture Points⁴

As well as four supplementary needles being used in the head area, additional needles may be placed in the hand and foot. Relaxation can begin within two minutes and may be so profound that the patient may fall asleep. This is thought to be related to the release of endorphins and serotonin in the central nervous system.³

Ear Acupuncture

Ear acupuncture acts as a standalone therapy and the principle is that all the sites are located on the ear. The ear is a micro system which reflects the entire brain represented on the outer portion of the ear. Conditions affecting the physical, mental, or emotional health of the patient are assumed to be treatable by stimulation of the surface of the ear exclusively.

Fiske and Dickinson conducted a study of the role of acupuncture in controlling the gagging reflex using a review of ten cases.⁵ Ten people agreed to try ear acupuncture to control gagging during dental treatment. The patients were assessed for the severity of their gagging problem prior to the treatment. Acupuncture needles were inserted into a specific anti-gagging point on each ear, they were manipulated and left in situ.



Dental treatment was then carried out and the effectiveness of the acupuncture in preventing gagging was assessed. After treatment the needles were removed.⁵

Four people had a severe gag reflex which had prevented them from previously having any dental treatment and six people had a very severe reflex which made treatment impossible and affected their attendance. Ear acupuncture successfully completely controlled the gag reflex in eight cases and partially controlled the reflex in two cases. The cost of acupuncture is very low and no adverse side effects were reported by any of the cases. Fiske and Dickinson concluded that ear acupuncture was successful in controlling the gag reflex.⁵

Complications of Acupuncture

There are few reported complications of acupuncture in dentistry. Minor bleeding and superficial bleeding could occur but is not common. Appropriate training, appreciation of anatomy and cross infection protocols including the use of single use needles should be observed.

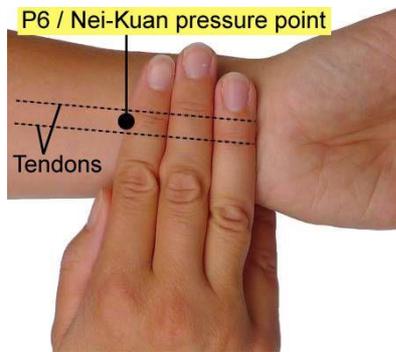
It is essential for dentists who offer acupuncture as part of their practice to thoroughly assess each patient's medical history, including any underlying health conditions or medications, and to discuss the potential risks and benefits of acupuncture treatment. Additionally, practitioners should receive proper training and certification in acupuncture techniques to ensure safe and effective treatment delivery. Patients should also be informed about what to expect during acupuncture treatment and encouraged to communicate any concerns or discomfort during the procedure.

Acupuncture can be a useful additional treatment modality for the dental team in the management of a range of dental conditions to facilitate treatment on patients that otherwise would be very difficult or impossible.³

Acupressure

Acupressure differs from acupuncture in that no penetration of the skin occurs. The sensitive points are known as caves or 'Suan-Zang'. Light pressure should be applied and increased until the patient feels slight pain. The pressure can be applied by the patient themselves, or the clinician. Finger or thumb pressure can be used. However, it is thought that thumb pressure is more beneficial than finger pressure.⁶

There are several points in relation to the prevention of gagging, and this is a useful technique to use when trying to take an impression. It is recommended to apply pressure to the points for 5 minutes prior to taking the impression and it is reported it could take up to 20 minutes of pressure to be successful.⁶



7

The P-6 Neiguan cave is located as shown in the picture.

This point is used for the gagging reflex, anxiety and for nausea.⁶ (You can find wrist bands for sale to combat nausea with a button which should be worn over the N-6 pressure point).



8

The Hegu cave is located as shown in this picture.

This point is used for anti-gagging.⁶



9

The Chengjang REN -24 point is shown in this picture and is another point that has been shown to be effective in anti-gagging. ⁶

Complications of Acupressure

While acupressure is generally considered safe when practiced correctly, there can be some adverse side effects, especially if the practitioner is not trained and competent. Here are some potential adverse effects:

- Bruising: Vigorous or prolonged pressure may result in bruising at the site of application.
- Nausea or dizziness: Some people may experience feelings of nausea or dizziness during or after acupressure treatment, particularly if they are sensitive to stimulation.
- Fatigue: Deep relaxation induced by acupressure may lead to feelings of fatigue or drowsiness, especially if the treatment is lengthy. ⁶

Hypnosis



Hypnosis has been defined in a variety of ways:

"A comparatively harmless, non invasive therapeutic technique which gives the practitioner the opportunity to get to the root of stress-related conditions rather than merely relieving the symptoms." ¹⁰

"Hypnosis is an extension of a caring and gentle approach to facilitate empathy between therapist and patient, hopefully to establish a much-desired rapport to help the patient explore and clarify his/her problem in terms of specific experiences, feelings and behaviour. Hypnosis thus provides a possibility of structuring that relationship in a way that offers significant clinical benefits for those patients whom they are needed most." ¹¹

"It is the vital relationship between a patient and therapist which produces the desired results of hypnotherapy, a therapy totally based upon collaboration between patient and therapist, and one which helps patients to create positive changes in lives."¹²

Finally, the University of Sheffield diploma course in clinical hypnosis provides its students with the following definition:

"A waking state of awareness (or consciousness), in which a person's attention is detached from his or her immediate environment and is absorbed by inner experiences such as feelings, cognition and imagery."¹³

In dentistry, it can be considered a valuable technique in patient management, which can be used to widen the treatment options that are offered to patients if the clinician is appropriately trained and qualified to use the technique of hypnosis.¹³

Suggestion

Many of us use suggestion in a positive way as opposed to a negative way to instigate a feeling of trust and confidence for patients to alleviate their fears. For example, 'you will feel quite comfortable' compared to the negative suggestion of 'this won't hurt'. To process the thought pattern of 'this won't hurt' the patient first has to consider what hurt means to them. The use of suggestion could be considered an informal form of hypnosis and can be used as a viable patient management technique.¹³

Choosing which patients are suitable for hypnosis depends on the motivation and rapport achieved with the patient by the clinician. The initial stages of hypnosis involve direct and indirect suggestion.

Direct Suggestion

Direct suggestion is a clear request for a particular response by the hypnotist to the patient. This involves making statements to a patient to inform them of what you want them to do, for example you may say 'Your right hand is becoming lighter and soon you will be able to lift it easily'.¹³

Indirect Suggestion

Indirect suggestions are defined as those suggestions that have a degree of ambiguity and allow for increased latitude in responding on the part of the patient. This involves using statements like 'you may feel your right hand is becoming lighter, or you may feel your left hand is becoming lighter, or you may not feel anything'.¹³

Using Hypnosis in Dentistry

Hypnosis can be used in dentistry to:

- Reduce the patient's anxiety and fear
- Control of pain
- Improving patient cooperation
- To assist in dealing with dental phobias
- Modify maladaptive oral habits (clenching, gagging, tongue thrusting, clenching)
- To reduce the use of chemical anaesthesia and sedation
- As a therapy for chronic facial pain syndrome and temporomandibular joint (TMJ) disorders
- To assist in oral hygiene compliance^{11,13}

Reducing Anxiety and Fear

The use of hypnosis as a general relaxation strategy is often used with the anxious patient. Often the patient who is anxious in the dental situation also experiences a much lower pain threshold and using hypnosis helps the patient to get to the root of the problem and provides an understanding of the situation.¹¹

Control of Pain

Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage or imagining such damage.¹¹ Hypnosis can be used to try and create a long-term change in the patients attitude towards their dental experience and in doing so alleviate any fears and in turn allow the patient control of emotions regarding pain. A variety of hypnosis techniques could be used such as: suggestions and deep relaxation; hypnotic anaesthesia and transformation of pain into a visual image.

Improving Cooperation

Patients can experience problems with tolerance of new orthodontic appliances or dentures, or new oral hygiene techniques and hypnosis can help encourage motivation using suitable suggestions which would enhance tolerance or encourage the right attitude.¹³

Dental Phobias

The use of hypnosis in dealing with dental phobias is well documented and many case reports can be found.

Modifying Maladaptive Oral Habits

Hypnosis can be particularly useful for controlling anxiety, the gagging reflex, tongue thrusting, bruxism, and clenching. Specific hypnotic suggestions can over a period of appointments has been well documenting in assisting these types of habits.^{11,13}

Reducing the use of Chemical Anaesthesia and Sedation

A technique called 'glove anaesthesia' can be used, it is necessary to induce a deep state of relaxation followed by suggestion. It is suggested to the patient that their hand has become very numb, then the patient is asked to imagine that the numbness is transferred to their mouth. It can take several sessions to use this technique successfully.^{11,13}

Lu and Lu studied the combined use of hypnosis and sedation for 17 medically compromised patients who were to undergo dental treatment and the results showed that the amount of sedative agent required was reduced if hypnotic induction preceded the sedation.¹⁴

Chronic Facial Pain Syndrome and TMJ Disorders

There are several studies that have demonstrated strong clinical evidence to suggest that hypnosis can be successfully used to control chronic facial pain and TMJ disorders. However, they do conclude that many variables contribute to this type of pain and therefore hypnosis for these types of cases can be complex.^{15,16}

Oral Hygiene Compliance

A study by Kelly et al. looked at the usefulness of hypnosis in the formation of a positive health habit - using dental floss. Two groups were used and both were informed of the importance of flossing, one group was hypnotised and suggestions given. The results demonstrated 67% of the people whose gingival health improved were from the group that was hypnotised.¹⁷

Limitations of Hypnosis

To practice hypnosis the clinician must have undergone specialised training. It does have its limitations; the clinician may fail to understand the patient's problem fully. The patient may fail to understand/recognise their own problem enough to explain it to the clinician. The patient may be noncompliant or may refuse this type of therapy. The therapy may not be successful for the patient which in turn could affect the rapport and trust between the patient and clinician.

Conclusion

This article has explored three different types of complementary therapy that can be used in dentistry when a clinician or team member is adequately trained to carry them out. All three therapies have a role to play in improving the dental experience for the patient.

Personal Development Plan and Reflective Learning

This CPD is linked to the following GDC Enhanced CPD Development Outcome:

A. Effective communication with patients, the dental team, and others across dentistry, including when obtaining consent, dealing with complaints, and raising concerns when patients are at risk.

C. Maintenance and development of knowledge and skill within your field of practice.

D. Maintenance of skills, behaviours and attitudes which maintain patient confidence in you and the dental profession and put patients' interests first.

Reflective learning is now a requirement of the GDC Enhanced Professional Development Scheme. As such, you will now be offered the opportunity to answer some reflective learning questions for the CPD you complete. These will be:

- 1) What did you learn (or confirm) from the activity that was helpful or relevant to your daily work and patients?
- 2) Comment on any changes/updates needed in your daily work
- 3) How has completion of this CPD article benefitted your work as a DCP?

Further reading

<https://hypnotc.com/types-of-hypnotherapy/>

<https://www.hypnotherapy-directory.org.uk/content/hypnotherapy-types.html>

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