OPERATIVE & THERAPEUTIC DENTAL HYPNOSIS

Introduction

Hypnosis can be intriguing, fascinating and frightening... Everybody has an opinion on it and those who practise it are convinced.

What we think about it is often coloured by popular imagery, the media, hearsay and so on, providing plenty of fuel for the imagination, as well as for excessive, even irrational behaviour.



Catalepsy between two chairs as part of a stage hypnosis act

What we often see is an ignorance or lack of understanding about what hypnosis really is... of the fields in which it can be applied and the results it allows us to obtain, as well as the medical and technological advances in neuroscience that validate it scientifically. Recent years have seen a renewed interest in hypnosis and its use in dentistry, but this is more of a *re*discovery than a discovery.

Medical hypnosis was taught in medical schools in France in the early 20th century, before disappearing and then reappearing in its official form in the US in 1953 thanks to the American Medical Association.

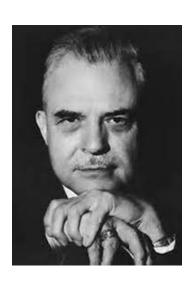
It has been taught in medical and dental faculties in the Englishspeaking world since the late 1950s, when books dedicated specifically to dental hypnosis began to be published (2) (3). After a handful of minor inroads made by Dr Cherchève (4) in the 1970s, hypnosis did not become an official part of the curriculum for university-level dental surgery courses in France until 2015, with the creation of the University Diploma of Dental Hypnosis (DUHD) at the Faculty of Odontology at Nice Sophia Antipolis University. Books about the use of hypnosis in dentistry are beginning to appear once more (5) (6) (7) (8).

But what exactly is hypnosis and how can it be applied in the dental surgery? What benefits can we derive from it?

Inspired by our daily professional practice, it is our hope that this article will describe in a simple and educational way how to use hypnosis in your surgery, to improve the conditions of care for both patients and practitioners alike.

Defining hypnosis





Dave Elman & Milton Erickson

There is currently no consensus as to the definition of hypnosis. For Elman, it was a state of mind that allowed for the bypassing of the critical factor of consciousness and the establishment of selective thinking (9).

For Erickson, it was a special state of consciousness characterised by receptivity to ideas (10).

For neuroscientists, it is a modified state of consciousness characterised by increased blood flow to the occipital, parietal, precentral, prefrontal and cingulate cortexes.

From a neurophysiological perspective, the precuneus and the

mesial frontal lobes are disabled. The hypnotic state is associated with a decrease in pain perception due to an increase in functional modulation between the anterior cingulate cortex and a broad neural network of cortical and subcortical structures involved in the various components of pain (11).

To define hypnosis more simply to the general public and our patients, we explain that during the day, they are conscious, while at night they sleep and dream. Hypnosis is simply about making you dream during the day. When our brains dream, they manifest psychological and physiological phenomena that are different from those manifested in an ordinary state of consciousness.

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How can this state of modified consciousness be applied?

There are two kinds of primary applications in odontology:

Operative

- . Long sessions (prosthesis, endodontics, surgery, periodontology, implantology, etc.);
- . Analgesia, anaesthesia (reduction in injected dose, complete

suppression of anaesthesia);
. Pain management (acute and chronic);

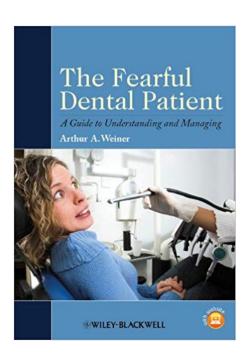
- . Operative control (nausea, salivation, bleeding, mouth opening);
- . Post-operative optimisation (wound healing, pain, oedema);
- . Spatio-temporal distortion (selective amnesia, complete amnesia, shortened or increased perception of time).

<u>Therapeutic</u>

- . Comfort (stress, anxiety, phobia);
- . Therapeutic alliance (patients, children);
- . Participation (dentofacial orthopaedics, prosthetic integration);
- . Behavioural (smoking cessation, bruxism, parafunction, dietary changes, oral hygiene, onychophagia, thumb sucking, etc.);
- . Self-hypnosis (for the practitioner).

Why should you use hypnosis in the surgery?

90% of patients admit they do not enjoy visiting the dentist. 90% of dentists do not understand that despite medical progress (dental chairs, anaesthesia, CAD/CAM, etc.) patients are still afraid of the dental surgery.



Popular image of the dentist

Why?

While scientific progress has been made, our profession must take psychological progress on board.

For the patient's view of the dentist to change, the dentist's view of the patient must change.

Hypnosis allows for this to be integrated harmoniously.

The mouth is a very delicate area and highly charged both on an emotional and symbolic level; located on our face, it is the centre of our body's identity.

The specifics of the dental surgery make it favourable to the practice of hypnosis.

Every patient who visits the surgery dreams of being somewhere else: they are ready to be taken out of themselves. As they approach the chair, drill or forceps, patients are in a negative trance. They are focused on their teeth and mouth, while all their senses are heightened: visual, auditory, kinesthetic, olfactory and gustatory.

Everything is favourable to the induction of a hypnotic state: all you have to do is change the polarity of the trance, going from negative to positive, the principle of covert hypnosis.

How do you integrate hypnosis into the dental surgery?

First of all, we can make an information sheet about the use of hypnosis in the surgery available in the waiting room.

The medical questionnaire given to all patients includes a section about behavioural issues, allowing for the introduction of hypnosis.

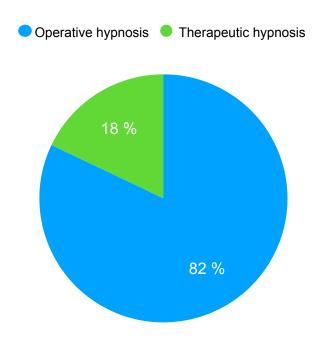
"Do you feel stressed at the thought of coming to the surgery? We use dental hypnosis as standard practice, would you be interested?" We give patients all the information they need about hypnosis while talking to them at the surgery.

For over 15 years, we have been treating around half of the ten patients we see every day with hypnosis.

These hypnosis sessions are all filmed for medical and legal reasons and the thousands of recorded hypnosis sessions form a database used for research work, in the form of theses (12) as well as for training as part of the DUHD diploma.

The more than 8,500 hypnosis sessions carried out in our surgery can be broken down as follows:

- Operative hypnosis: 1,495 treatments, 1,745 prostheses, 1,275 surgery, 950 periodontology, 975 implantology, 650 paediatric dentistry;
- Therapeutic hypnosis: 545 smoking cessation, 340 dental phobia,
 615 bruxism, 35 dietary changes, 15 miscellaneous.



Hypnosis has not always had a good press. This tends to feed the unjustified delusion of a loss of control by the subject (the patient) and of an all-powerful operator (the practitioner). In order to debunk these misconceptions, we reassure patients by explaining to them what hypnosis really is and giving them access to the video recording of their session. All hypnosis sessions carried out in our surgery conform to an ethical framework. Medical hypnosis is considerate, caring and respectful towards the patient.

How do you use hypnosis in the dental surgery?

The way we use hypnosis in our surgery can be broken down into three dimensions.

The first dimension is communication with the patient.

NPL (Neuro-Linguistic Programming) created by R Bandler and J Grinder – the result of modelling carried out by remarkable therapists (M Erickson, V Satir and F Perls) – provides us with a number of tools that allow us to communicate with the patient (13).

The techniques of synchronisation, calibration (non-verbal, paraverbal and verbal elements), anchoring, preliminary discussion using the metamodel and the determination of metaprogrammes all allow us to establish a conscious and subconscious communication with the patient.

A second dimension is so-called Ericksonian conversational hypnosis, which will allow us to go further in our communication with the subject's subconscious. It uses specific language techniques from the work of M Erickson (Milton Model), R Dilts (Sleight of Mouth Patterns) and, more recently, I Ledochowski (Mind Bending Language). (14) (15) (16)



Conversational hypnosis

Finally, the third dimension we use every day is formal hypnosis. This is based on Elmanian hypnosis, the hypnosis described and formulated by Dave Elman in the 20th century.

While we sometimes carry out conversational hypnosis with our patients without them realising, obtaining a deep hypnotic trance is a psychological process that relies primarily on verbal (language), para-verbal (voice, tone, rhythm) and non-verbal (bodily interactions) elements.

We use formal hypnosis in two specific areas: operative and therapeutic hypnosis.



Formal hypnosis induction

Operative hypnosis consists of performing a dental treatment under hypnosis. With the consent of the patient, we use it for all treatment sessions, whatever the length of the treatment, its nature (care, prosthesis, surgery, periodontics, implantology) or the age of the patient (children are particularly well suited to hypnosis). Therapeutic hypnosis is indicated as part of behavioural therapy linked to our dental practice (dental phobia, smoking cessation, stress management, dietary changes).

What is a hypnotic trance?

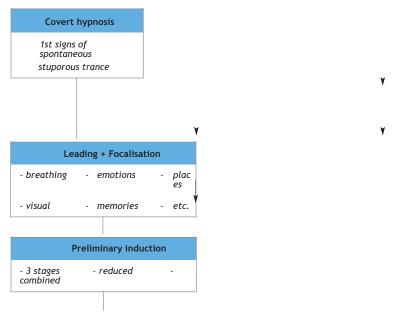
In formal hypnosis, we systematically take steps to achieve a deep trance in order to ensure maximum efficiency and comfort for the patient and the healthcare team.

Erickson described three different types of trance:

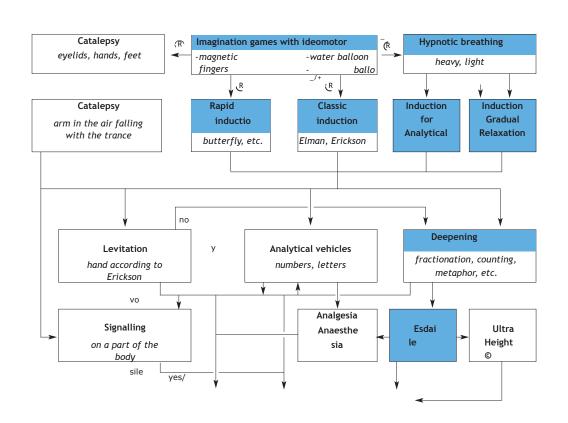
- The common trance of everyday life: "A trance that occurs when we are absorbed in an activity or conversation".
- The deep stuporous trance: "Passive responsive behaviour, marked by both psychological and physiological retardation of the subject".
- The deep somnambulistic trance: "Level of hypnosis that permits subjects to function adequately and directly at an unconscious level of awareness without interference by the conscious mind". "The subject is seemingly awake and functioning adequately, freely, and well in the total hypnotic situation, in a manner similar to that of a non-hypnotised person operating at the waking level".

Depending on treatment indications, we direct the trance towards either a deep stuporous trance or a deep somnambulistic trance.

Based on the modelling of strategies in formal hypnosis, we have created a mind map of the procedures we use (8).



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Does hypnosis take time?

Dave Elman, a famous American hypnotist of the 1950s, trained thousands of practitioners (dentists, nurses, gynaecologists, doctors and anaesthetists) in the use of operative and therapeutic hypnosis.

"You must learn how to hypnotise anybody who comes into your surgery within one minute. If you don't, you will not use it every day and it will be of no interest to you". Hypnosis in the surgery should be simple, quick and effective.

The term induction (from the Latin *inducere*, to bring inside) refers to the technique used to hypnotise a patient.

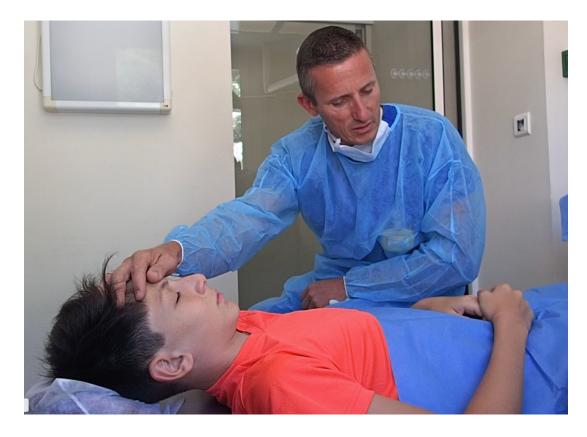
The use of classic, fast and instant inductions allows us to adapt to every clinical situation and subject.

Classic (Ericksonian) inductions allow the patient to be hypnotised in several minutes.

Fast (Elmanian) inductions allow the patient to be hypnotised in two to three minutes.

Instant inductions take no more than a few seconds to hypnotise the subject.

These techniques can all be learned in a pragmatic way to achieve reproducible results.



Instant hypnosis before a wisdom tooth procedure

Can anyone be hypnotised?

Hypnosis is a natural state of human consciousness.

It involves creating a switch in the brain by activating daytime dreaming. Because everyone sleeps and dreams, everyone can be hypnotised, if they show willingness.

There is no doubt that hypnosis is a science, but, more than that, it is an art that allows a state of imagination to be amplified in order to lead the subject into a hypnotic trance.

You will not encounter resistant subjects; any inhibitions relating to hypnosis will have been removed during the preliminary discussion. However, while some subjects are not more suggestible than others, some are more willing to go into a trance.

Some are virtuosos of hypnosis and go into a deep trance in just a few seconds. Others go into a trance more gradually. As with learning anything, patients will go into hypnosis more deeply and quickly as their treatment sessions progress. If a treatment plan incorporates longer or more complex sessions (surgery, etc.), these treatments will be left until later in the plan, by which time the subject will have learned how to go into a deep trance.



Deep stuporous trance:

How does the patient behave while they are hypnotised?

A hypnotic trance provides access to a brain function that differs from ordinary consciousness.

Empirically and gradually, we are able to observe the deepening of the trance as time goes on. In other words, we see the following hypnotic phenomena as the subject becomes more suggestible:

- Ideomotor movements: allowing communication with the subject's subconscious throughout operative or therapeutic treatment (thanks to the establishment of procedural, temporal or intuitive signalling), also allowing for the management of saliva, bleeding, nausea, etc.
- Catalepsy and levitation phenomena: allowing for the deepening of the trance as well as the maintenance of relaxation, with an open jaw or motionless tongue throughout the treatment.
- Temporal phenomena with partial amnesia: allowing the subject to be able to remember only the beneficial part of the dental treatment (relaxation, comfort, well-being), or complete amnesia, allowing the entire treatment session to be forgotten. Temporal distortions may also give the subject the impression that a two-hour session has lasted only a few minutes. Temporal regression phenomena, used in therapeutic hypnosis (treatment of phobias), are used in Elmanian hypnosis (treatment by regression to the cause).
- Analgesia phenomena (partial loss of sensitivity): allowing many treatments to be carried out without anaesthesia (scaling and root planing, dental restoration, etc.) and more advanced anaesthesia phenomena (total loss of sensitivity), allowing all types of treatment to be carried out without anaesthesia (mucogingival surgery, unitary, partial or full implants, emerged or impacted wisdom teeth).
- Positive or negative visual, auditory, kinesthetic, olfactory or gustatory hallucinations (useful in operative and therapeutic hypnosis, and acute pain management through negative kinesthetic hallucination).

These phenomena may seem surprising to the general public but are commonplace in hypnosis. You simply need to view going into a deep trance as if it were a dream state in the brain. The suggestions provided by the operator feed the subject's

inner reality. In the context of operative and therapeutic hypnosis, the suggestions given to the subject will help them adapt their psychological and physiological reactions to the environment.

What is hypnosis in the surgery really like?

We will focus on formal hypnosis here.

In operative hypnosis, we have a short preliminary conversation with the patient to explain to them what hypnosis is, to remove any inhibitions linked to mistaken beliefs and to create subconscious anticipation.

We will then ask the subject to proceed with some imagination games (formerly called suggestibility tests) in order to assess their willingness and ability to be hypnotised (quantitative and qualitative).

We then perform an induction to put the subject into a trance. Experience tells us that inductions are neither compulsory nor necessary for obtaining a trance. They are just the first suggestion accepted by the subject as their hypnosis begins.

Inductions can be classic, fast or instant. We adapt to the subconscious response offered to us by the subject.

The induction is followed by a deepening technique, if the patient is to be brought into a stuporous deep trance, or techniques that develop hypnotic phenomena if our aim is that of a deep somnambulistic trance.

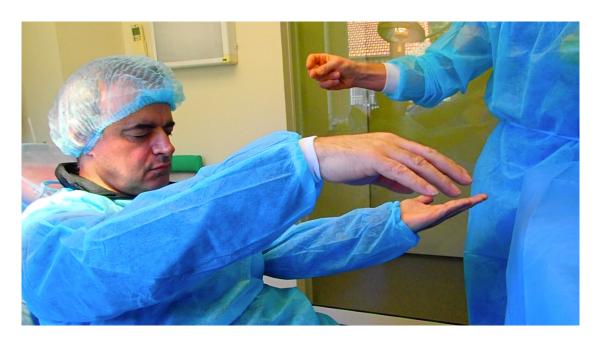
The operative work is then carried out by adapting the suggestions to the clinical situation and changes in the environment.

Under hypnosis, the subject can perform all their usual conscious functions, as well as all automatic functions, both subconscious (required) or unconscious (innate).

The patient is not asleep while under hypnosis; they are in a state of focus, concentration and open to appropriate suggestions. They are in a complete state of relaxation of both body and mind. The hypnotic trance always appears spectacular to the observer but feels much more natural to those experiencing it.

Finally, at the end of the session, the subject is brought back to an ordinary state of consciousness, returning to the here and now using an emergence technique (direct or indirect).

They should feel in great shape, completely re-associated and in their normal state of consciousness.



Deep somnambulistic trance induction

So, you don't need to use anaesthesia anymore?

Whenever we tell patients that we use hypnosis in the surgery, the first question they ask is about the use of anaesthesia. We explain that the goal of hypnosis is first and foremost for us to perform the treatment in a state of optimal comfort and relaxation.

The vast majority of patients do not enjoy coming to our surgeries for treatment. Many get stressed and some are even phobic. The mouth is a part of the body that has a great emotional symbolism. When they are offered the opportunity to receive the treatment in a state of complete relaxation of both body and mind, the patient begins to look at the experience of receiving dental treatment in an entirely different way. This strengthens the therapeutic relationship. Analgesia is easily achieved in a deep trance and allows us to carry out a number of procedures without anaesthesia.

The patient thus remains in absolute comfort throughout the treatment (scaling and root planing, operative dentistry, etc.). When it comes to hypnotic anaesthesia, the patient must be put into a deep state, known as the Esdaile state after the first British surgeon who performed hundreds of hypno-anaesthesia procedures in the second half of the 19th century (limb amputations, cancerous tumour removals, trepanning, etc.). This Elmanian technique allows any type of surgery, even the most advanced, to be performed without

any anaesthesia at all, while keeping the patient in a complete state of relaxation.

Over the past 15 years, around fifty procedures have been performed in the dental surgery without anaesthesia (mucogingival surgery, multiple dental extractions, unitary, partial or full implants, and the removal of emerged or impacted wisdom teeth).

These procedures have been carried out from an experimental perspective, working with patients keen to discover the technique. Except in rare cases of absolute contraindication to local anaesthesia for the patient, these techniques allow the operator to test the limits of hypnosis more profoundly.

They are only carried out on patients with significant motivation as the absence of classic anaesthesia can severely inhibit the ability to go into a trance.

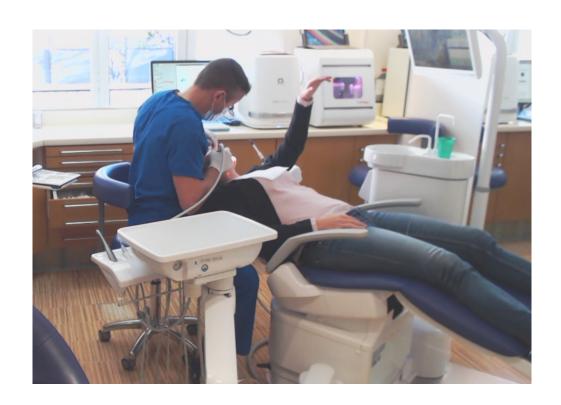


Hypno-anaesthesia in implantology

Does the patient need to be constantly talked to while hypnotised?

The type of operative hypnosis carried out in the surgery is Elmanian hypnosis. (17).

Unlike Ericksonian hypnosis, focused on language techniques, Elmanian hypnosis focuses on hypnotic phenomena that put the patient into a deep somnambulistic or stuporous trance. Once the patient is in deep hypnosis, there is no longer any need to talk to them. The only suggestions given are of an operative nature in order to modify the subject's reactions to environmental changes. The suggestions are always direct and permissive, simple and positive.



Operative hypnosis (hand raising)

The type of therapeutic hypnosis carried out in the surgery is also Elmanian hypnosis. (18).

It allows us to treat any behavioural issues linked to dentistry (smoking cessation, bruxism, parafunction, dietary changes, oral hygiene, onychophagia, thumb sucking, etc.). In the case of therapeutic hypnosis, a number of techniques will be used (regression to the cause, double dissociation, reframing, switch, etc.) by talking to the patient, asking them to speak, or by establishing signalling (procedural, temporal or intuitive) and producing

hypnotic phenomena (catalepsy, levitation, amnesia, hallucination). This psycho-physical approach gives us the opportunity to address the subject's subconscious as a whole, both body and mind.



Therapeutic hypnosis (bruxism)

Operative and therapeutic hypnosis are two different worlds. In operative hypnosis, hypnotic rather than psychological tools are primarily required to manage the trance while carrying out treatment.

In therapeutic hypnosis, psychological tools take precedence over relatively few hypnotic tools.

What about patient feedback?

Every patient who has benefited from hypnosis treatment is enthusiastic about it and keen to share their experiences with those around them.

They become used to receiving treatment in a state of comfort and relaxation. They become used to receiving hypnosis, even for more commonplace procedures. It changes their approach to dental care in particular, and even to medical treatment in general, because they go on to develop self-hypnosis techniques that allow them to find an inner space of serenity and relaxation at any time.

Without the need for post-hypnotic suggestions or anchoring techniques, patients go faster and further into hypnosis over the course of the treatment sessions.

This offers the advantage of allowing us to perform more complex or invasive treatments after just a few sessions. Patients come to the surgery free from stress and apprehension and with complete confidence. There is no better way of strengthening the therapeutic relationship.

What about feedback from practitioners trained in hypnosis?

As part of the DUHD, we train dental surgeons in the practice and daily use of hypnosis.

After incorporating hypnotic techniques, they are able to hypnotise a patient and manage an operative trance perfectly. Hypnosis requires you to be creative, to invent new words, suggestions and inductions. They gradually personalise and individualise their techniques as they make the tool of hypnosis their own.

It is a question of giving power back to the imagination: for themselves and for others.

But as well as hetero-hypnosis (with a subject and operator), they also learn self-hypnosis, a wonderful tool for learning to manage your energy, motivation and inner state.

Self-hypnosis allows you to play on your inner state, your psychological and physiological conditions, and to adapt flexibly to everyday situations in the dental surgery.

By regularly carrying out self-hypnosis, the practitioner will feel all the positive benefits of stress and energy management.

For the healthcare team, a day punctuated by hypnosis is much calmer and more comfortable.

Ultimately, by learning hypnosis, dental surgeons learn to use what is an extraordinary tool for:

- Building a better relationship with the patient and fostering support for treatment;
- Saving time, comfort and energy on a daily basis;
- Working more freely without unnecessary pressure;
- Avoiding burnout on the part of the healthcare team;
- Receiving recognition;
- Strengthening customer loyalty.

Does the dental nurse need to be trained in hypnosis?

In order to promote synergy within the healthcare team, it is preferable that the nurse should have received training in hypnosis, or at least that they understand what a hypnotic trance is.

The dental nurse can be trained independently by the practitioner with whom they work to directly benefit patients in the surgery, while also providing indirect benefits to the practitioner.

A nurse trained in hypnosis will be able to better understand how to induce hypnosis, how hypnosis works and how to manage a hypnotic trance.

They can also take over from the practitioner at any time: lead the preliminary discussion and imagination games, carry out the induction or deepening, or manage the trance during the operative phase.

While under hypnosis, the subject can be guided by more than one operator.



Imagination games led by the dental nurse

Conclusion

The vast majority of publications, books and conferences in dentistry report advances associated with the practice of hypnosis (implantology, CAD/CAM, etc.). This scientific progress is inevitable because it builds on each discovery in order to move forwards. This is a good thing because the procedures we use today lead to greater ease and comfort for both patient and practitioner.

But what about human progress? It is sometimes good to put ourselves in the shoes of our patients to understand how they experience their treatment in the dental surgery and view our profession.

The more we evolve technologically, the more we can help our profession become increasingly aware of the psychological dimension, so the bodies and minds of our patients are viewed in the same way.

Beyond the personal passion that has motivated us for twenty years, the reintroduction of hypnosis in dentistry seems to show us real progress on a daily basis.

Hypnosis is undoubtedly the most powerful human tool on an interpersonal and intrapersonal level.

Operative and therapeutic dental hypnosis are a highly specialised form of hypnosis that require special training.

They must be learned and practised in an ethical way.

In the future, there is no doubt that our patients will notice a difference in our professional skills, but also in our human and psychological skills.

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