

A new approach to balancing dental fear and anxiety using Bach™ Flower Therapy

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ABSTRACT



Treatments in dentistry currently consist of an interdisciplinary approach, including (but not necessarily limited to) the holistic perspective. The different fields of allopathic and complementary medicine are used together to ensure not only a high-quality restorative treatment, but also to provide patients with psychological and emotional support. This perspective also applies to dental anxiety, which consists of complex (emotional, vegetative and psychomotor) manifestations. One of the most well-known complementary therapies for reducing dental fear and anxiety is Bach™ Flower Therapy. Even if the mechanism of action of this therapy is not yet scientifically documented, notable results have been and continue to be reported in the literature in several clinical studies on patients with dental diseases. It is indicated for both adults and children, in the latter when they go through major biological changes, such as primary and permanent dentition. As a conclusion, Bach™ flower therapy is effective and complementary to dental treatments applied to patients, by reducing stress, anxiety, as well as creating a climate of peace, trust and confidence, both for the patient and the doctor. In addition, it is a relatively accessible and cheap form of care, with no significant adverse effects noted so far.

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Introduction

Dental medicine treatments are no longer confined to a simple restoration of carious or missing teeth, looked upon as an isolated instance. We need to have a wider perspective and consider the multitude of fine interconnections and interrelations among the structures of the human body.

Oral health is the major objective of all branches in dental medicine. The holistic approach is old, and goes back to the Hippocratic Collection, 375 B.C.; however, in the past few decades it has become an important part of medicine [1]. Unfortunately, physicians have been trained and are used to treat the physical ailments and their

symptoms, rather than deal with the psychological and emotional needs of patients.

The importance of this complete, global approach in dental medicine has its contribution towards obtaining a long-term favorable prognosis of maintaining the integrity of the dento-facial system, and of the whole human body, seen in its physical and subtle structural entirety [2,3].

It may be considered that dental medicine is one of the medical branches where we see the most numerous psychic and emotional aspects of fear and anxiety [4-6]. These are the specific emotions which patients going for a dental appointment are confronted with more often. Therefore, it is a must to manage such emotions, in order to obtain a successful treatment [7].

Fear is an emotion caused by a concrete threat, or by a threat perceived as such. It causes a neurological change, that includes the following steps: perception of a danger, real or imaginary and confrontation or avoidance. Essentially, dental fear goes back to fear of physical pain.

Anxiety is a state of internal emotional imbalance, where negative emotions come in (fear, worry) concerning a future potential danger – and this is where anxiety is different from fear, which is a reaction to an immediate danger. Sympathetic nervous reactions are present both in fear and in anxiety, of a higher intensity in the latter. Dental anxiety is a concern, not only from the emotional-psychic perspective of the patient, but mostly because of the behavior patterns it causes, which interfere with or prevent treatment [8].

The etiology of dental fear and anxiety comes from physical pain, most often by a direct experience (a negative one, caused by a previous dental treatment), or induced by family, friends or acquaintances who have had a stressful dental experience. The affective (emotional) component of physical pain is given by the interpretation of painful stimuli and combined with a number of variables: sex, age, previous painful experiences, education, behavior pattern [9,10]. On top of these, we have chronic pathologies or physiological conditions, as pregnancy, which alter the emotional status beside the physical one. At the same time, the educational and spiritual level, the opening of the patient to holistic therapies that lead to the state of inner balance and peace are particularly important [11].

The mind plays a huge role both in patient's attitude and behavior, also during the treatment or healing period. Therefore, many and various approaches have been focused to psychological support. For management of dental fear and anxiety have been proposed different medical (anti-anxiety drugs, nitrous oxide inhalational sedation) or alternative and complementary techniques, as: cognitive-behavioral therapy, melotherapy, audio and visual distraction aids, relaxing, hypnosis, natural holistic remedies [12,13].

Dental treatments in children are an extremely important aspect, as youngsters cannot control fear and its reactions [14]. Fear of the dentist has to be tackled from the beginning in the right way, with sympathy, tact and kindness, so that we don't give fear the opportunity of turning into anxiety or a traumatic experience which will mark the adult to be. Therefore, the management of dental phobia in pediatric patients is a very sensitive and studied subject [15]. We have seen many adult patients who have suffered a major psychological trauma in childhood, following a visit to the dentist, or derived from prevailing community beliefs [16,17]. Such patients are prone to highly intense anxiety attacks, even going to panic attacks or loss of conscience (lipothymia).

Discussions

BachTM Flower Therapy

Fortunately, we have now several complementary therapies to support us in gaining emotional rebalance for

patients undergoing dental treatments and support psychological disturbances they are confronted with. One of the most profound and efficient is Dr. Edward Bach's Flower Remedy Therapy. Dr. Bach, (1886 –1936), was a very gifted British physician and bacteriologist. Having gone through a personal dramatic experience, he realized that emotions and motivation may have a direct and regenerating effect on health. So, when we're talking about prevention or healing, we have to concentrate on the mind, the soul and emotions – this is the place the first wave of disease as well as healing begins. If we change our attitude towards illness, life, our peers, and ourselves, we obtain a more rapid recovery, by activating the potential of healing and increased immunity. Whenever a person is completely balanced, they have that constant sense of fulfillment and harmony, the mind has only positive thoughts, and they have that inner strength and love for all of creation [18-20]. Bach Flower Remedies are considered a gift from nature, they are flowers of wild plants.

Remedies are prepared and acts rebalancing emotions and help heal the inner of a human being, exposed to stress and trauma. These remedies act by the subtle energy transmitted from the flower to the extract. Vibrations act at the subtle energetic level of a patient, relieve negative emotions and balance the emotional status. Although the Bach therapy action mechanism has not been scientifically completely investigated and demonstrated (as all other complementary and alternative therapies), floral remedies are used for many years with notable results in all fields of medicine to improve the clinical signs of various diseases [21-24]. They are also known to sustain mental and emotional health, especially in children [25].

The human body reactions in front of dental fear and anxiety are: emotional, vegetative and psychomotor [26]. Bach Flower Remedies can be helpful at all levels, starting with emotional and psychological one. They are an invaluable help for patients with dental fear, since they decrease stress and anxiety, create a peaceful climate, of calm and internal harmony.



Figure 1. (Left) Complete BachTM flower kit with all 38 remedies. (Right) The use of BachTM flower remedies: 2-4 remedy drops in a glass of water.

Bach therapy is extremely important in dental medicine, as it provides a state of well-being for both patient and physician before, during and after treatment, allowing them to have a successful therapeutic relationship [27]. Flower remedies may be used for children, pregnant women (since they are not toxic), when patients undergo difficult and complicated surgery, or for emotional rebalance when patients are supposed to adapt to new conditions, such as mobile prosthetics.

Bach remedies are very easy to prepare and administer. Actually, this idea of simplicity and ease is to be found throughout Dr. Bach's activity. Plants are easy to gather, prepare and use. Only wild, non-poisonous plants are being used, in order to obtain most benefits from their purity [28].

Bach flower remedies are prepared in two ways: the sun method and the boiling method. Dr. Bach chose to prepare 20 remedies by the first and the remaining 18 remedies by the second method. Traditionally, the high-quality mother-tinctures are prepared at the Bach Centre in Great Britain, and are being sent to Nelsons™ company, which bottles the essences [29,30].

The 38 plants used in Bach therapy fall in seven groups, based on the personality types Dr. Bach had studied. Each group includes a variable number of remedies. And here are the groups: remedies for fear; for loneliness; for over-care for the welfare of others; for uncertainty; for over-sensitivity to influences and ideas; for insufficient interest in present circumstances; for despondency and despair.

Rescue Remedy

Rescue Remedy is, probably, the best-known and most used of all Bach flower remedies. It is not prepared from a single plant, but rather a combination of five remedies, to be used for recuperation in crisis situations, emergencies, accidents, all involving panic or danger, possibly coma, swooning or loss of conscience [31]. Of course it will not replace emergency medical treatments, but rather it will be a precious help – and that's why it is highly recommended to include it in all first-aid kits. In emergency situations, add four drops of Rescue Remedy to a glass of still water and take a sip at intervals, for instance every 15 minutes or more frequently if needed, until the emotional balance is restored. The five plants used in the emergency remedy are: Clematis – for faint, far-away, disconnected feelings, loss of conscience, unconsciousness; Rock Rose – for terror; Star of Bethlehem – for shock and suffering; Impatiens – for irritability and tension; Cherry Plum – for hysteria or fear of loss of self-control. Rescue Remedy acts as a remedy with unique qualities and may be combined with other remedies, as need be.

Bach flower remedies are designed to be taken internally most of the times, but they may be used externally under certain circumstances. For external use you can apply remedies to pulse points – wrist, temple, or on the lips.

There are two ways to administer the remedies, and this goes according to the situation. We are very often faced with acute situations in dental medicine – fear, panic, stress, when patients come in for their treatment. In such situations, in order to obtain a fast rebalance of emotions and of behavior, just add the selected remedies in a glass of still water: two drops of each individual essence and four drops of Rescue Remedy, if you want to add that one. The patient is supposed to sip slowly, at intervals, until he/she feels rebalanced. Rescue Remedy can be purchased as spray, easy to use, especially with patients suffering from lipothymia.

When the feeling of panic is powerful, another option is to start taking flower remedies a few days before the appointment. This is extremely useful for children, but is also indicated for anxious patients before major interventions [32,33]. The minimum daily dosage is four drops four times a day. Rescue Gummy Stars and Rescue Pastilles are ready to use products, attractive to children – they come as candies with various flavors: orange, cranberry, black currant.

When you are dealing with deep rooted emotional imbalance, manifesting during a dental treatment, you need to prepare a treatment bottle, and use it daily for a longer period of time (3-4 weeks); use the same minimal dosage every day – four drops four times a day or more often if needed. Bach remedies may be used after the surgery, or after completion of the dental treatment, in order to obtain emotional support of the patient, until he/she gets used to the new status in the oral cavity (Table 1).

Table 1. Bach™ Flower Therapy to balance dental fear and anxiety

Emotional problems related to dental treatments	Bach™ Flower Remedy
Dental fear	Mimulus
Dental anxiety to loss of self-control	Cherry Plum, Rescue Remedy
Dental office panic attacks	Rock Rose, Rescue Remedy
Excessive parental care related to children's dental treatment	Red Chestnut
Over care of dental medical staff for their patience	Red Chestnut
Impatience, irritability in accept dental treatments	Impatience
Period of important changes: dental eruption, major prosthetic treatments	Walnut
Dental anxiety, repetitive thoughts about dental treatment	White Chestnut
Unprocessed, old physical and psychological dental trauma, shock about serious diagnosis	Star of Bethlehem, Rescue Remedy
Dental fear in children	Mimulus, Cherry plum, Impatience

Specific BachTM Flower Therapy in dental medicine

Of the 38 Bach remedies, in dental medicine we use those in the fear group, as complementary therapy for fear and anxiety control: Mimulus (fear of known things), Cherry Plum (fear of losing your reason), Rock Rose (panic, terror), Red Chestnut (fear or exaggerated anxiety towards others –for example mother for her child or dentist for his patients). The following remedies are also recommended: Impatiens, Walnut, White Chestnut, Star of Bethlehem.

Mimulus

Mimulus (*Mimulus guttatus*) is a remedy that helps overcome various everyday fears, among which fear of dental treatment is a common one.

Mimulus is a remedy given for medium intensity fears, practically speaking for most patients going to the dentist. It is a fear which the patient is able to address, manage and control. It is fear of physical pain and of other unpleasant stimuli, associated in the process: smell, noise and vibrations of the instruments, but the necessity of dental treatments, especially due to dental pain, makes them to present to the dental office [34]. Patients are sweating and hypersalivation, but the fear level and its signs are not extremely high, we're not talking about terror or panic attack. It is a less known fact, namely that persons dealing with such fears are not sharing them with others, on the contrary, they are trying to dissimulate them and brave them out.

Mimulus helps in regaining the inner force and courage. It helps patients overcome fears, phobias, anxieties, and face situations, usually considered very stressing.

Cherry Plum

Cherry Plum (*Prunus cerasifera*), is the remedy for fear of losing control: tantrums, hysteria, crying. Such explosive reactions are frequent with children in dental practices – they refuse to open their mouth, to sit on the chair, they yell, and cannot be handled by the dentist, they simply cannot control their fear [35,36]. The situation is extremely complicated when it is about children with mental health conditions and in these cases Bach flower remedies are very useful [37]. During such tantrums they waste large amounts of physical and mental energy and it is possible that they are marked in adulthood by such negative memories of visits to the dentist. The remedy prepared from Cherry Plum flowers helps heal inner tensions and even avoid explosive tantrums caused by fear [38]. It can be associated with Rescue Remedy.

Rock Rose

Rock Rose (*Helianthemum nummularium*), the remedy for panic, is the most important one in states of extreme fear and panic attacks. It is frequently used in dental treatments, to eliminate stress and it comes in handy in restoring calm when we are dealing with extreme fear,

irrespective of its source: an event in the daily life, or a fear which the patient can't face as he/she doesn't know where it came from, for instance, destructive emotional effects of childhood dental treatments [39].

Panic attacks, which patients often have at the dentist's, are intense neuro-vegetative signs: palpitations; heightened pulse; perspiration; shaking or whole body shaking; lack of air or suffocating; pain or thoracic discomfort; nausea or abdominal discomfort; dizziness; instability or swooning; fear of losing control; fear of dying; paresthesia; sensation of cold or hot. A "panic attack" actually means the sudden onset of fear, accompanied by physical and emotional signs and by the fear of a serious consequence, a heart attack, for instance [40]. So, you need to help patients calm down, and Bach Remedies are essential to this effect. Rock Rose may be given alone or combined with Rescue Remedy. Rock Rose drops, given repeatedly, help a person find courage in critical situations, and even deal with the most terrible fear.

Red Chestnut

Red Chestnut (*Aesculus carnea*), for exaggerated fear or worry felt over the well-being of others; unlike previous remedies, this one is indicated for both patients and physicians.

A good example is that of parents accompanying children for dental treatments, and who experience an excessive fear, anxiety and worry. Unfortunately, this fear is an overreaction and parents manage to pass on their anxiety to children, thus increasing their own fears [41,42]. The remedy can be used on both parents and children, as parents transmit their fears to their children rather than support them [43].

Medical staff may become prone to an exaggerated concern for the welfare of patients, along with parents. For instance, it is possible for a dentist to over-worry about the result of a treatment and about how the patient will accept it. Red Chestnut helps overcome fears for the safety and welfare of others and brings a state of inner calm [44].

Impatiens

Impatiens (*Impatiens glandulifera*), from the group of remedies for loneliness, is also very helpful in the emotional balance of dental patients.

Impatiens is associated with impatience, irritability, and psychic tension caused by fear of seeing the dentist. It is mostly children who may need Impatiens, but adults who are impatient may benefit from it: they can't seem to wait for their appointment, they act in a rushed way, and are disturbed by others when they act or think slower. This type of patient is under the permanent impression that treatments are not delivered expeditiously, with immediate obvious results. Time spent on the dentist's chair is always too long and irritating.

Impatiens is one of the first remedies discovered by Dr. Bach – he used to say that its action is very rapid; he often

used it himself. The remedy helps a patient manifest positive side features described above. Inner agitation disappears, making room for harmony, peace and accepting treatment with calm. The patient will be calm, kind, full of tact and understanding for the fact that people are different and live at different speeds.

Walnut

Walnut (*Juglans regia*) is of great help in dental medicine as well. It belongs to the group of remedies for over-sensitivity to influences and ideas. It is a remedy that helps people adapt to change and is used mostly for anxiety rather than fear per se.

It is indicated when children go through major biological changes, like primary and permanent teething [45]. It can also be given to kids when they come in for treatment, so that they can adapt easier to the environment, considering their emotionally fragile state due to their young age [46,47]. Walnut is very useful to combat anxiety when a patient is faced with major changes, like, for instance the insertion of an intraoral mobile prosthesis or after major maxillofacial surgeries, which leave behind significant defects of hard and soft tissues.

White Chestnut

White Chestnut (*Aesculus hippocastanum*) belongs to the group of remedies for insufficient interest in present circumstances. It is recommended to anxious patients, who have many repetitive, worrisome thoughts. Often, they do not sleep the night before treatment, especially if we are talking about a more extensive one. The patient has an anticipatory anxiety, thinking over and over if everything will turn out well, turning things in his/her mind permanently. Such a case is when the patient is over-anxious for what may happen in connection with the treatment.

White Chestnut drops help patients put a stop to invasive and repetitive thoughts. It acts at the mental level and eliminates anxiety, insomnia and worries at the beginning of a dental treatment.

The group of remedies for despondency and despair has very important use in dental treatment as well, by means of Star of Bethlehem (*Ornithogalum umbellatum*).

Star of Bethlehem is the remedy for shock and the after effects of shock, especially in the case of earlier dental traumas or dental treatments, which have left a long-lasting negative effect, even to adulthood [48]. We have seen frequent cases of adults burdened by the experience of a painful dental procedure, or by the unfit attitude of a dentist during childhood. This is a type of event that has caused the anxiety pattern present in adult years.

Star of Bethlehem is a remedy for psycho-emotional traumas or long-term suffering. It may also be prescribed for shock caused by an unexpected and dramatic news, like a serious diagnostic or an important facial and cranioencephalic trauma. Star of Bethlehem helps remove

pain and suffering, and can help in reducing high levels of situational anxiety [49]. The remedy is often prescribed in association with other Bach essences, as patients are faced with difficult events and all sorts of suffering. Star of Bethlehem is to be found in Rescue Remedy, along with other four remedies.

Star of Bethlehem helps clear the mind, increase vitality and psychic tonus and the patient will have a more rapid physical and mental recovery.

Conclusions

Bach Flower Therapy is a treatment field that is part of complementary medicine. It can be used in dental medicine, in association with the classical dental treatments, in order to facilitate the therapeutic maneuvers and healing process. Bach therapy brings along positive emotional changes, which help patients overcome fear and anxiety on the dentist's chair. Everything in nature has a counterpart in the human being, and this is why nature is and will be a permanent healing source.

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Compliance with ethical standards

Any aspect of the work covered in this manuscript has been conducted with the ethical approval of all relevant bodies and that such approvals are acknowledged within the manuscript.

Conflict of interest disclosure

There are no known conflicts of interest in the publication of this article. The manuscript was read and approved by all authors.

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