Facilitated Self Havening for the Treatment of Dental Phobias and Anxiety

Amygdala Depotentiation Therapy

A New Cure for Dental Phobia

Where does a phobia come from? Why is it so persistent? How does it cause such a myriad of physiological changes? What can be done about it?

It is important to realize that that all phobias regardless of the feared object, thought, sound, or experience are commonly linked to the brain. In fact, all phobias are encoded in the same place. That place is the Amygdala. It is part of an early brain that its primary function is to keep the organism alive. Survival, the first commandment of living, is how we got to where we are today. It is the amygdale's function to rapidly and without thought alert us to threats. It is here that we must go to solve the problem of the encoded traumatic memory that causes such distress and makes us respond as if our life was dependant on escape. When a patient who is a dental phobic sits in your chair they are literally trying to run for their lives and they are trapped!!!!!

Current Trends

Recent literature describes several approaches to alleviating the emotional discomfort and physiological changes that a phobia creates. Those papers focus on the anxiety itself and attempt to down-regulate the fear response. Three approaches are routinely used to address the concerns of the patient. First, are the talk therapies, such as Cognitive Behavioral Therapy. (1)This approach involves an interaction and a relationship between a trained therapist and a client. Second, is Systematic Desensitization/Exposure, where the individual is slowly introduced to the feared situation. (2) Third, medication can be used to alter the brains neurochemical response to the exposure. (3)

Within the last few years new methodologies have been presented that involve sensory input to alter the underlying responsiveness and consequences to the encoded traumatic event that created the phobia. Thought Field Therapy (TFT), Emotional Freedom Technique (EFT), and Eye Movement Desensitization and Reprocessing (EMDR)(4)through various mechanisms attempt to change the underlying structure and chemistry of the brain. In addition, we now present HAVENING (5) , Amygdala Depotentiation Therapy. It is a psycho-sensory therapy as it uses non specific sensory input to alter the brain. In the case of Havening the sensory input is touch.

Where does a phobia come from?

Fundamentally, a phobia (emotional trauma) is created during an emotionally charged event. It requires four components for a moment to become activated (traumatized) . They are

1) The event itself i.e. a terrible dental experience

2) Meaning of the event i.e. having a deep attachment to the outcome "I may die"

3) Landscape of the brain must be susceptible i.e. frightened

4) The moment must feel inescapable i.e. held down, Papoose

These 4 components occurring simultaneously create an encoding moment. That is when our limbic system (flight or fight) permanently embeds this experience in our early brain. At this moment the thalamus (a part of the limbic system) sends a signal to the lateral amygdale and activates post synaptic AMPAR receptors. These AMPAR receptors facilitate electrical current to the parts of the brain that are required for a flight or fight response. It is, for survival, a good thing when you can rapidly remember a threatening situation before it gets to dangerous moment. It is unhealthy if the response never shuts off and acts as chronic stressor. That is what a phobia is like as there is no shut off valve after the trauma is encoded. It remains activated throughout life as if where happening for the first time. This response, produced involuntarily by the brain has only one objective: to flee or defend against a fearful object or situation. These primitive responses were needed to increase muscle strength, increase blood flow, and decrease the experience of pain. Over millions of years evolution has perfected a cascade of neurochemicals such, as nor epinephrine, dopamine, and cortisol that rapidly prepare the organism to survive the threat. (6)

Furthermore, dental phobias and anxieties come from a wide variety of experiences. These include almost drowning, suffocation, sexual abuse, childhood accidents, poor parenting, genetic tendencies, fear of pain, loss of youth, embarrassment, shame, guilt and many others. From the perspective of ADT they are all treated the same. Alter the permanently encoded memory.

What are the consequences?

Avoidance behavior is the most common outcome of an encoded phobia. The individual knows that upon cues and stimuli similar to the ones occurring at the time of the initial event it produces feelings of fear and discomfort. This can lead to other problems. Dental neglect can pose cosmetic concerns that alter social interactions. In addition, infections and loss of the ability to chew change nutritional options and lead to an unhealthy diet. Dental health, comfort, function and esthetics play an enormous role in our relationships with others. In 1985 I headed a team of dentists that were going to restore dentitions that were totally edentulous with early Branemark implants. As part of our history we had the psychiatry department evaluate these first subjects. They concluded that people who had lost their own teeth suffered as much as those with limb or breast loss!!!! Our field of work has significant social, sexual and emotional elements that are just as important as a well fitting margin and need to be considered.

Removing the Phobia

So how can we remove an embedded trauma?

Since four requirements are needed for traumatization (a phobia) to occur if we can somehow trick the brain into thinking it has an escape (the 4th requirement) then the encoded memory cannot be retained as a phobia, only as a simple memory. Then there is no fear or physiological response.

Tricking the brain

By activating the previous trauma by imagining brings the emotional core (activated AMPAR receptors) onto the surface of the lateral amygdale. When they are stimulated the physiological cascade of flight or fight is present and the AMPAR receptor is liable for disruption.

When a non-human escapes a predator, the brain is flooded with serotonin. (7) This primitive neurochemical allows for the brain to become calmer and inhibits a fear response, thus allowing for normative behavior. In humans, rising serotonin (meaning a safe place is found) on recall of the trauma allows for a disconnect between the emotional core (depotentiates the activated AMPAR receptors) and the memory. Thus serotonin extinguishes the phobia and the event is no longer perceived as inescapable and therefore no longer encoded as a trauma.

Facilitated Event Self Havening

Havening is a system of techniques that alter the brains landscape and produce a normalization of neuromodulators and neurochemicals. FESH is the model where the client is directed by the practitioner to follow a series of commands and at the same time applying self havening touch. Havening makes it possible to alter the response to a stimulus that would normally generate a fear response by using the extra sensory aspects of touch. It is well known that touch increases serotonin in the brain . (8) Swedish massage has been shown to create physically and mentally relaxed states by increasing serotonin and dopamine. It is this connection between serotonin and touch that forms the basis for treatment

Pre Havening Protocols

If the patient cannot bring to mind a specific event, then have the patient focus on the current situation and feelings.

Find a comfortable place where you will not be disturbed for about 15 minutes. I sometimes haven people in the dental chair (as they are very activated), however some people feel safer with their feet on the ground. Have the patient bring to mind the entire circumstances involved with the memory or moment. The sights, sounds and smells should fill the subject's mind until she approaches being in that moment. The patient's eyes should be closed. Figure 1. The patient should also experience the emotional content of the moment. The "experience of fear" is the response to an unresolved trauma.

Havening Procedures

Havening involves three components.

1) The activation of the event and its emotional core

2) Havening touch (Kinesthetic component)

3) Distraction Techniques

Activation and displacement of the phobia/anxiety

History taking is the key to removing the unwanted traumatically encoded pathway. Early traumas set the stage for current circumstances. To start displacement, the initial sensitizing event must be found and activated. For some, lying down in the chair with water in their open mouths and equipment in there as well may remind them of an incident where they nearly drowned. This overlap of cues and contexts activates the fear response (activated AMPAR receptors) and creates the phobic response as if it were the dental procedure. It is not. In some dental phobias the event is a dental visit. The event quite often occurs at a fairly young age. Usually the patient can give a clear narrative of the experience and can see clearly the whole event. The fact that the memory is still so significant after so many years speaks to the high emotional content at the time of encoding.

Kinesthetic Component

The touch is meant to be, soothing, gentle supportive and produces a dramatic surge of serotonin in the brain. Light touch is best and the movements feel comforting. During the havening touch process the patient should be encouraged to allow the shoulders to drop and the jaw to become slack (have them wet their lips and gently have the lips touch).

Distraction Techniques

At the same time distracting thoughts and tasks are introduced to the moment displacing the present mindset. Try it yourself. Hum “Happy Birthday” out loud and count backwards from 20 in your mind. So only one thought can exist at a time! Eye rolling, humming a tune, counting backwards by multiple numbers causes an intense focus on the task at hand and slowly displaces the originally held thought

Process

Allow 30-40 seconds to have the patient recall and “feel” the moment with eyes closed. Request, a subjective unit of distress (SUD), which is a number from 0 to 10 which the patient will indicate the degree of “being in the moment”. Ten represents being right there, zero represents its disappearance. She should open her eyes and and write the number that she feels. The sequence that I find effective is found in the table. Figure2

During this process I use an unmodulated, somewhat steady voice that is never hurried. I am always encouraging and never correcting when simple mistakes are made. The client gently arm havens, rubbing their hands from shoulder to elbow. I then tell the client to "visualize walking up a flight of twenty stairs each step feeling more relaxed and safe and at the top of the stairs you see a beautiful visa of your own making". You can also use jumping rope, rowing, putting glasses on a shelf, etc. Figure 3

Continue with face havening. That is where the client gently washes her face and strokes her forehead. This is done in conjunction with humming a tune, Happy Birthday, Twinkle, Twinkle little Star or any other tune that they may know. Hum for about one minute. Figure 4

The client's eyes are still shut and now they should rub their hands together while counting backwards from any number. I like to make it so they have to use thought to get the right answer. Try counting backwards from 40 by 4's or 7's from seventy. Encouragement during the process is continuous and I say things like "you are good at this" or "you're doing great". Figure 5

At this time have the client open their eyes and follow your fingers as you trace an infinity sign (an eight lying on its side and have them follow it for 4 cycles. Slowly. Figure 6. Have them close their eyes and look at the back of their eyelids.

Finally, have them sit with their palms up taking 3 deep breaths, thru the nose and out the mouth. Rest for 15 seconds. Figure. 7

Repeat 3 times and take an SUD by having the client open their eyes and write the number they are feeling currently. Say "When you are ready open your eyes" Continue havening cycle to the number is zero or there is no change after 3 rounds (nine cycles).

The combination of activation of the memory and its emotional core along with the increase in serotonin, creates a window for disrupting the linkage which has been encoded at the time of traumatization. The distraction displaces the thought from working memory and inhibits further responsiveness. Since the exact circumstances of the previous traumatizing moment cannot be replicated, the memory fades and becomes a simple memory without emotional context and is unable to produce a fear response.

After havening the patients feel calm. Following the havening process the memory and stimulating cues are removed, the patient is asked to attempt to recapture the same feelings she had at the start of the process. Invariably, the patient will be unable to recall the previous thought experience and may present in one of 4 ways: (1) the thought is gone, (2) the thought is looked at from a Meta position (away from), (3) the thought is fuzzy, or (4) the problem is solved metaphorically. The patient finds a safe haven. When this is accomplished the phobia disappears forever. It is the author's experience that these techniques work extremely well when used with patients who present with varying degrees of anticipatory anxiety. Most of the therapy can easily be done in the dental chair using the above protocol. One or two repetitions should be sufficient to achieve significant results. After years of experience this non drug modality has been shown to be safe and effective. For further information, scientific foundation, testimonials and learning tools go to www.havening.org.

Conclusion

A technique has been demonstrated that utilizes the patient's thoughts, emotions and the extrasensory components of touch to modify encoded pathways to disrupt and eliminate unwanted responses from previous traumatic experiences.

Photo

1) Acquiring thought or the event and emotional core for 30-40 seconds
2) Writing the SUD
3) Arm havening and visualization processes
4) Face Havening and Humming a tune
5) Palm Havening and counting backwards
6) Eye movement followed by eye closure
7) Hands on hands followed by three deep breaths hold for 15 seconds
8) Obtaining new SUD

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