## The Role of Energy

## in Healing Trauma

## Robert Scaer, MD

ife trauma appears in many guises, sometimes as an overwhelming experience such as the catastrophic events of 9/11, sometimes as subtle as the enforced helplessness of gender bias, or the fear produced by a critical, unsupportive parent. In each case, the regions of the survival brain that serve as the early warning systems to guard us from danger are activated. When a state of helplessness and lack of control accompanies such negative life experiences, our brains are unable to rid themselves of the messages of threat. All of the experiences that accompanied these traumatic events are stored in our largely unconscious survival memory centers in the form of body-based memories (body sensations, muscle bracing and movement patterns, images, smells, gut and heart sensations, etc.). Usually the conscious memories of such emotional events are also stored in a form closely linked to emotions and sensations of the body, and present as symptoms of fear or anxiety. The replication of these memories and body sensations with exposure to reminder cues of the traumatic event forms the structure of trauma, as is seen in PTSD. Each traumatic experience exists in our brain in a remarkably precise and consistent structure containing all of the emotional, somatic, autonomic and conscious memory traces of the event. These events thereafter are repeatedly perceived as being a present threat, even though our logical brain realizes that the experience is actually over.

The part of our brain that processes and stores these memories is the right-sided limbic, or emo-

tional brain. The specific brain center responsible for arousal in the face of threat is called the amygdala. Without this center, we would be in a perpetual state of calm, but on the other hand would be hopelessly vulnerable to danger in the absence of an early warning system. Neurologist Antonio Damasio describes a patient who presented with a type of seizure characterized by brief episodes of confusion with amnesia. An MRI of her brain revealed calcification of both amygdale - somehow they had been destroyed. Realizing the unique nature of this patient's condition, he performed psychometric testing which revealed that she was incapable of anger or fear, a state consistent with lack of function of her brain's arousal system. She certainly was pleasant to be around, but would probably not survive in an environment filled with danger.

This remarkable case provides a clue to the ultimate ingredient in healing trauma. The storage of traumabased experiences in the survival brain is based on the same process of classical conditioning employed by Pavlov with his dogs. A survival cue, food, is paired with novel cue, a bell, leading to salivation with ringing the bell. In trauma, a survival cue, danger, is linked with the body messages of the event, leading to fear/arousal with exposure to memories or somatic cues of the trauma. Extinction of salivation was accomplished by presenting the bell without the food for several trials. Extinction of fear/arousal with exposure to traumatic memories and cues should be accomplished by presenting these cues in the absence of a perception of danger. And this will occur, as with Damasio's patient, without the input of the amygdala. So theoretically, we should be able to heal trauma by inhibiting the amygdala while the person brings up memory cues of a traumatic event.

So how do we shut off the amygdala? We do know that the brain contains a set of checks and balances to modulate arousal in case the perceived danger is not life-threatening. One of the primary inhibitory centers that puts a damper on the amygdala is called the anterior cingulated gyrus. This is the part of the limbic systam that, among other things, promotes maternal/infant attunement and bonding, and bonding within a close social structure. Our perceived safety, it seems, is significantly dependent on our intimate interactions with other humans. patient in the attunement of the therapeutic alignment. In many respects, this replicates the maternal/ infant attunement so important for the emotional development of the child. I believe that this therapist/ patient attunement probably accounts for what we call the placebo effect, a necessary ingredient for all healing, and something always to be fostered in this relationship. This process by itself will bring the cingulate on-line and begin the process of healing. Healing Touch by its very nature specifically enhances this attunement.

Another critical social practice whose role in a society is to promote cohesiveness of its members is ritual. I believe social rituals, which in indigenous societies usually involve drumming, chanting and touching, are actually designed to promote the healing of the

We need to bring the physiology of the brain back into the field of therapy, realizing that trauma is basically a non-verbal experience. We need to bring the messages of the body back into trauma therapy as a means of extinguishing those portions of traumatic memory.

of arousal due to danger, the left side of the brain that serves logical thought and particularly speech, is relatively shut down. You don't need words to initiate the fight/flight response. If these regions of the brain are brought on-line, however, they also exert an inhibitory influence on the right amygdala. So here we have several means of putting a lid on the amygdala that might afford an opportunity to extinguish traumatic memory cues.

First, how can we bring the anterior cingulate on line? The obvious answer is to activate the processes of social and individual attunement that make up the fabric of social bonding. The front line of this attack is dependent on the bonding of the therapist with the has a specific meaning to the society, imbuing it with specific properties that serve social bonding. Rituals alone are a powerful means of activating the cingulate. Rituals are part of the basic technique in many energy-based practices, including tapping techniques and Healing Touch.

Bringing the left cerebral hemisphere on-line may be accomplished in many rather obvious ways. Any left/ right alternating stimulus – auditory, tactile, visual – will accomplish this process. Imaging a traumatic memory while one is experiencing this recruitment of the left hemisphere will extinguish in part any traumatic memory cue that has emerged. Left hemisphere activation is accomplished with alternating visual,



auditory or tactile stimuli in EMDR. The eye-rolling, humming (right brain) and counting (left brain) in the tapping techniques accomplish this as well. Healing Touch accomplishes this through the tactile route.

Finally, empowerment is the antithesis of helplessness, and trauma is mitigated by a sense of control. Many of the energy and somatic therapy techniques involve spoken words or images of self-affirmation that promote this state, and by definition inhibit the degree of activation of the amygdala in a state of danger. Imagery of the traumatic event that includes a state of control and empowerment, and reversal of the traumatic outcome is a powerful adjunct to all healing.

The so-called Energy Techniques in trauma have a dubious place in the field of trauma therapy in the minds of traditional psychologists. The techniques involve arcane, mystical and even seemingly senseless rituals that may seem to insult the verbally-based logic of traditional therapies. We need to bring the physiology of the brain back into the field of therapy, realizing that trauma is basically a non-verbal experience. We need to bring the messages of the body back into trauma therapy as a means of extinguishing those portions of traumatic memory. Energy medicine incorporates these principles, and embracing these "arcane" techniques offers the opportunity of finding many other means to access and manipulate the limbic system, and to extinguish trauma.