

On Soothing

In 1987 I attended a conference where the deaths of premature infants was being discussed. It had recently been discovered how to prevent some premature infant deaths by lightly stroking the backs of the premature infants. I was particularly interested in the presentation because as a psychoanalyst I was aware of a study done after World War Two of babies who were being raised in an orphanage. Babies not held when they were fed had a markedly higher mortality rate than babies who were held. While this was always intuitively obvious it had not previously been proved. At that time the biological reason for this observation was a mystery.

During an initially unrelated research project in North Carolina, researchers were trying to raise rat pups separately from their mothers in an attempt to discern what aspects of the rat pups eventual behaviors are learned from their mothers and what may be inherited. They were trying to learn what aspects of the rat's adult behavior could be attributed to natural instincts versus learned behaviors. The project was having a major difficulty. All the rat pups were dying when they were separated from their mothers. From the researcher's perspective the pups were being provided with all they should need to survive including their mother's milk that was being given to them using a dropper. However none of the pups were surviving.

A graduate student involved in the research project noticed other rat mothers were licking their rat pups on the back of the head and upper shoulders as they nursed the pups. Wondering if this might be important they tried stroking the backs of the pups being raised separated from their mothers with an artist's paintbrush that was about the same size as the mother's tongue. To the delight of the researchers the rat pups that were stroked began to grow normally and survived!

A new project was undertaken to determine what the mechanism of this process was. It was discovered in rat pups, stimulating the upper shoulder area of the pup while the pup nursed caused the brain to release growth hormone necessary for survival in all mammals including humans. From this discovery it was speculated human premature infants might be dying because their backs were not being stimulated. Premature babies usually were left laying on their backs or sides in incubators to maintain warmth and humidity and prevent infection. It has since been demonstrated human infants have the same response to their backs being stroked as the rat pups. Many premature babies that had previously been unable to gain weight and grow normally returned to a normal growth curve when their backs were gently stroked after or during feeding.

Armed with this fascinating information I went home and discussed this with my wife. It seemed to me since growth hormone is important for all humans regardless of age then stroking the backs of our children and perhaps each other may produce beneficial results. The reason I remember I attended the conference in 1987 is that was the year my youngest son was born. We started stroking the backs of all the children as often as it felt reasonably natural to do so. Although we are average in size, our youngest son moved into the 99th percentile for height and weight and has remained there since he was an infant. When he would play on soccer teams we could overhear parents from the other teams wondering if our son was in the correct age bracket because he was almost always the biggest child on the field!

The other thing we noticed was how soothing it is for our backs to be stroked. It is very relaxing and quickly produces a feeling of wellbeing. The stroking is not a massage pushing on the underlying muscles. It is a gentle stroking of the skin covering the area of the trapezius muscle which goes from the base of the back of our skull out to the back edges of our shoulders and down to the middle of our back. It covers a baseball diamond shape on our back. It is also restricted to the upper half of our backs. The stroking needs to only last a few seconds to a minute to produce the positive feelings.

Our culture reflects this phenomenon in very interesting ways. We have sayings such as “I’ll scratch your back if you’ll scratch mine.” This area of the back is the area where we “pat each other on the back.” It is the only area of the body where we are generally allowed to touch another person without explicit permission (except for college campuses that require explicit permission to touch any area of the body). When we hug each other we often pat each other gently on the back in this area.

Once I became aware stroking this area was soothing, I would use it when one of my children would be curled up on bed in anger or in tears and was otherwise inconsolable or if they were having problems sleeping or had awakened from a scary dream. Gently stroking this area almost always quickly calmed them down, soothing upset feelings and restoring a feeling of safety and connection.

I have also used it with adults. It is a very non-intrusive way to express affection to a spouse or family member since it can be done almost anyplace even when the other person is working at a desk, standing performing some type of task or talking on the telephone or when they might be ill laying in bed. It is an asexual part of the body less likely to produce a feeling of invasive touch than any other part of the body.

Although it has not been proven scientifically I believe it is likely stroking this area also releases growth hormone in adults. Growth hormone is very important for health, healing and well being in all of us.

We would all be happier and probably healthier if we spent a little more time stroking each other’s backs.

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