

Nurturing Touch

Massage therapy helps calm & center children on the autism spectrum

by Clare La Plante

Ruth Elaine Hane was a difficult child. Now a 67-year old grandmother in Minneapolis, Minnesota, she didn't talk until she was nearly five.

She banged her head when she didn't get her way. She shied away from social gatherings, instead doing her own thing, often recklessly.

She suffered from night terrors—a sleep disorder with increased brain activity that can include screaming, sweating and rapid heart beat—and would often spend nights huddled under her bed, or climbing through the second floor window via the drainpipe, hanging with the neighborhood cat, often until 4 a.m.

"I did dangerous things and didn't realize they were dangerous," she says. She was impervious to the social and verbal cues of others. On the school playground, she would wonder why the other students would suddenly run inside when the teacher appeared. "The other children knew the teacher's hand wave meant 'recess is over,'" she says. "I had no idea."

It wasn't until she was 54—after marriage, two children and divorce—that her particular life experiences made sense. She soon received her own diagnosis of high-functioning autism.

A successful interior and fashion designer, Hane's diagnosis prompted her to seek information, education and adaptation skills. It also prompted a career change. "I decided I'd rather work on making people's lives better spiritually and emotionally."

She became a reiki master, and trained in shiatsu, zero balancing and other forms of massage. Today, clients with autism comprise a good part of her practice. She knows through experience that touch, on many levels, can help those with autism.

Understanding the Spectrum

"Massage puts the system into a more relaxed state where the heart rate and blood pressure decrease, and the system is running at a slower pace," says Tiffany Field, PhD, director of the Touch Research Institute at the University of Miami School of Medicine, which has conducted several studies on autism and touch.

This research has become especially relevant as autism's numbers continue to climb at a rate of approximately 10 percent to 17 percent annually. Today, one in 150 children will be diagnosed with autism. With boys, who are affected four times as much as girls, the rate could be as high as 1 in 94.

Some of these children are autistic from birth. However, there appears to be an increase in regressive autism, which starts at approximately 18 to 24 months, when parents see a baffling loss of words and social skills in their children.

Autism is referred to as a spectrum disorder, which means its symptoms can range from mild to acute, and can vary from person to person, even within the different categories.

Many children have trouble reading normal social cues, as Hane did. "It's hard to comply with society's unspoken rules," she says. "It can be very lonely and isolating." Additionally, most have sensory integration issues, where the sights, sounds, feels, smells and noises of the surrounding world can feel too bright, too loud, too harsh and too overpowering.

For example, Temple Grandin, PhD, a Colorado State University animal science professor and author of "Emergence: Labeled Autistic" about her journey as a fully autistic child to successfully functioning adult, couldn't stand scratchy clothes against her skin. "The school bell hurt my ears, like a dentist's drill hitting a nerve," she explains. "If people talked too fast, it sounded like gibberish."

Trusting Touch

No one can say exactly what causes autism and its related disorders, including Asperger's Syndrome, an autism- like condition usually without language delay, and various Pervasive Development Disorders (PDDs).

Here's what we do know: The brain develops differently in children with autism. A 2004 Annals of Neurology study reported inflammation in autistic brains. Most experts also agree that a genetic component to autism exists and that it's usually triggered by something, such as birth complications, environmental toxins, diet, other hereditary factors or a virus, for example.

We know that massage, along with a host of other therapies, including speech, occupational, nutritional and behavioral, can help—often significantly. Moderate pressure, says Field, stimulates the vagus nerve, one of the 12 cranial nerves in the brain, which often underperforms in those with autism. "When you increase vagal activity," she says, "you get stimulation in various parts of your body."

You slow the heart rate, for example, which can increase the ability to focus. One TRI study compared a control group of children who received moderate pressure and smooth, stroking movements for 15-minute sessions, twice a week for four weeks. "We found [the children] were able to be more on task from massage therapy," says Field. In another study, massage also helped the children sleep better, bringing things full circle.

"Some suggest a reason these children can't stay on task is because they're not sleeping well," says Field. "And we know that massage is very effective for sleep." Since these

children often have more severe sleep problems than average, she posits, the sleep benefits from massage may be greater for them.

Stimulating vagal activity may also help these children screen out background noise, says Field, increasing their capacity to listen and speak. Tina Allen, LMT, founder of Little Kidz, a children's health and nurturing touch organization, has seen these positive results from massage herself, starting with one of her very first clients with autism, a five-year-old girl named Annie.

"Her mom told me that Annie didn't like to talk to anyone," she says. "I was a last resort." Allen began the massage using props from a toy bag she kept in her office. "I told her a story where the race car drove around her back," she says. "Then a soft animal 'walked' on her arm." When Allen was done, Annie looked directly into her eyes, smiled, and asked for another story. "Her mom was almost in tears," says Allen. "She said she couldn't remember another time that she had reacted in such a way."

Allen's work with children with autism led her to a 1998 study that confirmed one of her intuitions: Lower levels of oxytocin—the so-called love hormone—were detected in the blood plasma of severely social-averse children with autism. The finding made perfect sense to Allen since oxytocin makes us feel warm, relaxed and stress-free, all gifts to those on the autism spectrum.

Taking Your Time

Of course, none of these results matter if you can't touch the children in the first place, so proceed with caution. Field says, in fact, that finding a way to touch these children was a concern during the first TRI study. How would they, she wondered, massage these often touch-averse children? The children, it turned out, were receptive—once the researchers took any surprises out of the equation.

Imagine typical social touch, which is often spontaneous and unpredictable, like a sudden hand on the shoulder, a quick hug or friendly slap on the back. These actions, seemingly so benign, can be stressful for people with autism. Instead, Field first modeled the massage on the children's teacher. "The children saw what we were going to do, and then we did that," she explains.

Salinas, California-based massage therapist Jackie Pia let one of her clients simply watch his sister's massage first. Then she let him wander around her office. "The number one thing is patience," she says.

Hane suggests even being a little preoccupied when the children come into your space, like a therapist friend of hers, who makes a point of eating an apple as a client enters, leaving him or her to freely explore the space. When your client is ready to be touched, take that slowly too.

"You can put your hand over theirs," says Grandin. "Start the massage with the child's own hand until he or she feels comfortable." It's sort of like how you can't tickle yourself,

she says. Or, as Allen did, introduce touch through toys and stories. "Have a grab bag with special toys with different textures," she says. This way, you can touch without initial skin-to-skin contact. She often starts in places without obvious eye-to-eye contact, such as the hands or feet.

Importantly, find the right pressure, which for many of these children will be medium to deep. "Light pressure can feel more like a tickle stimulation, and they may be averse," says Field.

In fact, deep pressure may be exactly what these children seek. When Grandin was a child, for example, she avoided hugs, but she loved deep pressure. She would make her bed tightly, so that she would be wrapped in sheets and blankets, helping her to sleep better.

As a teen, she took it up a notch, constructing her own version of a 'squeeze chute,' a machine that holds cattle so that veterinarians can work with them. This 'squeeze machine' or 'hugging machine,' as it's also called, offers lateral pressure over the entire body. For Grandin and others on the autism spectrum, this helps regulate the nervous system. Field sees a relationship between this 'hugging machine' and massage.

Grandin says you can learn a lot about a specific child by talking to parents or caregivers. "Ask parents if the child is a deep pressure seeker, or if he or she likes heavy blankets, tight clothing, rolling him- or herself up in things," she says. "Ask: 'If you touch them lightly, do they jump away?'"

When Pia first massaged Charlie, he emitted highpitched sounds, and flopped around, trying to get away, she says. It wasn't until the next session, when her touch went deeper, that he calmed down. Still, she proceeded cautiously. She invited him to massage her arm. "He kind of thought that was neat," she says. "So I said, 'OK, little guy, I'm going to do it to you.'" And she did, using a deep touch. Then this child, who avoided touch, turned over on his stomach, inviting her to massage his back.

Hane, who was terrified when she received her first massage, says to keep the massage work simple. She recommends always working both sides of the body equally. "Without a doubt, the autistic brain doesn't function in a coordinated way," she says. Any kind of balancing technique helps. She starts each session touching the opposite shoulder and ankle, crossing the meridian.

Limit other sensory stimulation. "They get a lot of background noise," says Field.

Hane, if she uses music at all, plays Enya or nature sounds. She painted her walls a soft grey. After one of her clients ignored her normal voice, Pia learned to speak in a whisper.

Finding What Works

Other related modalities may help as well, including craniosacral therapy, a manual therapy from the osteopath tradition. Rebecca Flowers, OTR, CSP, CST-D, was working as an occupational therapist when she read a study showing that adding craniosacral therapy to occupational could net 80 percent gains in an autistic child. "When they pulled away either modality, that number fell to 50 percent," she says.

She trained in craniosacral therapy and now heads pediatric education at the Upledger Institute in Palm Beach Gardens, Florida. It's essential therapy for those with autism, she believes, since the craniosacral system houses the central nervous system, where so much goes on for these children.

"When you're dealing with the central nervous system— 80 percent of which is about processing sensory information—you're making new neural connections, and causing the brain to process connections it already had in more effective and efficient ways," she says. In essence, it's building the foundation from which other therapies can flourish, helping to release restrictions in the membrane system and create internal movement.

She had one young client, Mitchell, a child so disruptive in public that his mother, in her own brand of preemptive strike, had cards printed up that explained he was autistic.

Flowers always knew when he was in the waiting room. "I would hear a shrill scream at the top of his lungs every thirty seconds," she says. "It was his way of communicating." After his first session, he only screamed when he wanted something. Within a year, he was talking.

The last she heard, he was graduating from high school, with a regular diploma. "And this is a child who was diagnosed as severely and profoundly mentally retarded," she says. "They said he should be institutionalized."

Whatever modality a therapist chooses, rapport is essential. "Children—especially children on the spectrum— know if you're willing to connect with them or if you're just doing something rote," says Hane. "They are very sensitive to whether people are willing to accept them as they are and not impose something on them."

To this end, read what you can. Study sensory issues and don't be afraid to walk in their shoes. Flowers has a class exercise where she takes her students to 'Planet Autism,' where you look around and see people who look like you, but you can't understand them and they can't understand you.

If you meet them somewhere in the middle, amazing things can happen.

"I had been told my whole life to try harder, and not be so sensitive," says Hane. "I began to doubt my own reality."

Now she's come to her senses, so to speak. "Let these children show you what calms them," says Flowers. "So you can meet them halfway. The world will be a much better place ... they can excel at what they excel at, and they can contribute."