**Correlation of Massage and increase of Oxytocin levels for Children with Autism**

 Autism is a developmental disorder characterized by poor social ability and verbal communication skills, as well as restrictive and repetitive behaviors. Not all children with the disorder are equally affected; symptoms range in severity. [In 2014](https://med.stanford.edu/news/all-news/2014/11/oxytocin-levels-in-blood-cerebrospinal-fluid-are-linked-study-fi.html), Karen Parker , PhD, associate professor of psychiatry and behavioral sciences and Antonio Hardan, MD, professor of psychiatry and behavioral sciences and senior author of the study, and their colleagues discovered that oxytocin levels vary greatly in children both with and without autism, and that those with low oxytocin have more social impairment regardless of whether they have autism.

 The study was published online July 10 in the[*Proceedings of the National Academy of Sciences*](http://www.pnas.org/). Although it was small, including a trial of 32 children, assigned to receive an intranasal oxytocin spray or a placebo spray twice daily for four weeks, Hardan concluded that even though “the effect of oxytocin was modest, the results are exciting because no other medications now exist to treat any of the core features of autism” Also the Oxytocin treatment produced more improvement in social behavior among children with autism who have low levels of the hormone to begin with.

 Another study done in UCLA, published just a couple years before, has found significant differences between the blood samples of the 65 participants receiving 15 min back massages and the control group of 30 that was just resting in a chair. The study has successfully concluded that massage increases the oxytocin levels in the body and reduces adrenocorticotropin hormone in humans. The Oxytocin is the hormone known to facilitate social bonding and according to researchers, Touch seems to affect the OT release, therefore it appears to sustain social bonds and increase cooperative behaviors.

 As the OT is found to make a difference in the treatment of the children with Autism, Massage may be an important method for increasing endogenous OT concentrations and of potential therapeutic benefit in disorders with social dysfunctions such as Autism where the basal OT levels are typically reduced. Massage can be used as a great, effective, complimentary, non-medicated intervention, that aids in increasing social relatedness, on-task behaviors, the much-craved bonding with the parents/caregivers and reduces the stress hormone levels of both.

 A research done in Japan, 2015, studying salivary OT levels after the massage of 7 children with Autism, by parents trained on Liddle Kidz Foundation protocols, every day for 20 min, prior to bedtime, has also found therapy-dependent increases in the levels of OT. The parents and children with ASD may be aversive to touch. However, the predictable movements of massage have been shown to decrease touch aversion and be more acceptable than the unpredictable social touch frequently resisted by children. Also light rather than deep and longer intervention rather than short periods of massage seemed to be efficient, enhancing vagal activity, which is closely related to attentiveness, and reducing off-task behaviors, similar results reported by earlier researches of T. Field.

 This study represents a great break in the ice for the specialists treating and consulting the children with ASD and their families. As we can see, Massage is a great, fun and potent tool in helping manage and reduce some of the symptoms of ASD. When done correctly, with proper training, it is safe and effective to be used as a complimentary therapy not only for the children on the Spectrum but for all children. When massage is taught to the parents/caregivers it becomes empowering and nurturing and it can greatly improve the parent-child relationship, furthermore, directly affecting the child’s emotional health.

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