

Collected Scientific Research Relating to the Use of Osteopathy with Autistic spectrum (people on the spectrum)

Important:

1) Osteopathy involves helping people's own self-healing abilities to work better, rather than focussing primarily on particular conditions.

2) Each person is different, and osteopathy treats them differently.

Therefore people respond to osteopathic treatment in different ways. Treatments that work for one person cannot be guaranteed to work for another person in the same way. The fact that there is scientific research supporting a treatment in a group of people does not mean that it will always work in the same way (which is probably true of all research).

A number of things make research into osteopathy challenging. These include the two aspects of osteopathy mentioned above, and also the lack of major commercial interests to provide funding in expectation of financial returns. At the same time, there is an emerging body of research demonstrating the usefulness of osteopathic treatment.

Please note: there is room for debate about the classifications used for these studies. Please let John Smartt know if you believe that any of these classifications are incorrect.

These studies are from peer-reviewed journals

Number
of studies:
3

Clinically and statistically significant results

Number
of studies:
3

Sorrell MA 2008 **Autistic Spectrum Disorder** AAO Journal Vol 18 Number 1 March

"What are the osteopathic considerations that we should consider? Lawrence Lavine, DO compiled a list of strain patterns commonly found in a sample of twenty-five autistic children examined between 1995 and 1999."

"In this patient, population whose median age at first visit was three years, 22 of the 25 children demonstrated left-sided cranial compression and/or restriction in the left middle cranial fossa. Palpable restrictions were evident in the left frontal temporal sphenoidal articulation regions extending to the sphenosquamous pivot area and left zygoma. The consistency of this finding appears highly relevant in light of the research cited which showed deficits linked to the left medial frontal lobe. For the three children who did not show this pattern, one exhibited a cranial torsion, and the other two had lateral strains with significant plagiocephaly. In all 25 children, bilateral condylar compression was noted and sacral motion was restricted.

Every child had a hyperextended sphenobasilar symphysis resulting in tension in the falx cerebri exerting a compressive force on the corpus callosum. The associated flattening of the tentorium cerebelli results in compression of the cerebellar space. The research cited showed cerebellar abnormalities, loss of Purkinje cells, neuronal antibodies and abnormal cerebellar peptides. In 22 of 25 children, a sacral torsion was found.

In all children, the motion of the thoracic diaphragm was out of phase with the other two diaphragms (tentorium cerebelli and pelvic diaphragm). The inherent motion of the central nervous system was compromised and pelvic restrictions through bilateral innominates were noted in all children.

For those familiar with osteopathic biodynamics, 22 of 25 showed a 90 degree to the left deviation of the midline posterior-anterior energy flow at the level of the sella turcica. In all children, the motion of the third ventricle and the ignition system through the third ventricle were impaired."

"Dr. Lavine treated all 25 of the children with osteopathic manipulation and all received one or more other interventions: dietary, homeopathic, or other medical or developmental therapies. In 1999, as part of the Autism 99 online conference, Dr. Lavine reported that 15 of the children were communicating in sentences of four words or more, initiating social contact and demonstrating spontaneous imaginative play. One child appeared to be fully recovered. Eleven were in regular preschool, kindergarten or grade school with some assistance, and 13 were in special school programs for autistic children.

Viola Frymann, DO, demonstrated an improvement in developmental scores with osteopathic manipulation in both neurotypical and learning disabled children.⁴² Stephen Blood, DO, demonstrated the benefits of osteopathic manipulation with a slowing of brain waves in children with ADD/ADHD, on electroencephalogram.⁴³ There is anecdotal and preliminary study information that this is also the case for osteopathic manipulation in children with autism. In addition to the direct benefits of osteopathic treatment, it is likely that removing the structural restrictions will enhance the benefits of other therapies. When strains in the tentorium cerebelli are released the cerebellum has adequate space for growth. When the pressure on the corpus callosum is relieved, the cerebral hemispheres can communicate with one another. Release of

Bramati-Castellarin I, Patel VB, Drysdale IP 2016 **Repeat-measures longitudinal study evaluating behavioural and gastrointestinal symptoms in children with autism before, during and after visceral osteopathic technique (VOT)** Journal of Bodywork and Movement Therapies Available online 14 January <http://www.sciencedirect.com/science/article/pii/S1360859216000024>

"This study investigated the influence of visceral osteopathic technique (VOT) on the behaviour and gastrointestinal (GI) symptoms of children with autism using a validated questionnaire to measure outcome."

"The 49 recruited autistic children suffered GI symptoms and impaired social interaction and communication, but were otherwise healthy. Thirty minute VOT sessions were applied to the abdomens of the children over a 6 week period whilst their GI and behavioural parameters were recorded. Outcomes were measured using a modified Autism Research Institute Secretin Outcomes Survey Form, the 'S.O.S Form'. Four questionnaires were completed by parents before treatment (control period), four completed during treatment (treatment period) and one completed six weeks after the last treatment (post treatment period). Subjects acted as their own controls."

"Results from repeat ANOVA demonstrated a positive, overall significant, symptomatic improvement ($p < 0.05$) in 'social behaviour and communication' and 'digestive signs' subscales of the questionnaire comparing before and after VOT. Significant improvement in vomiting ($p = 0.00029$), poor appetite ($p = 0.039$) and eye contact ($p = 0.035$) was also demonstrated after VOT application."

Kratz SV, Kerr J, Porter L. 2017 **The use of CranioSacral therapy for Autism Spectrum Disorders: Benefits from the viewpoints of parents, clients, and therapists.** Journal of Bodywork and Movement Therapies Jan;21(1):19-29 <https://www.ncbi.nlm.nih.gov/pubmed/28167177/>

"OBJECTIVES:

The objectives of this preliminary study were to explore: the use of CranioSacral Therapy for persons with Autism Spectrum Disorder, the demographics of participants, and the retrospective interpretation of reported changes related to the intervention. Participants included therapists, parents, and clients.

METHODS:

Recruitment of participants was conducted through electronic social and professional networks. Online questionnaire surveys were provided. Demographic questions were posed to understand both the extent of clinical use and the rationales for such treatment, and surveys were unique to each subject groups. All participants were given a 20-item functional behavior checklist as a means to measure their perception of change attributed to this intervention. Open-ended comments were also encouraged to explore perspectives from their experiential treatments. The Qualitative data collected was analyzed via Inductive Content Analysis. The data was stored on excel and analyzed manually and independently by all 3 authors.

RESULTS:

A total of 405 people responded to the recruitments and of the participants who completed surveys, 264 were therapists and 124 parents. Only a small sampling of clients responded. The demographics of professionals using CST for ASD, their level of CST training, and their qualifications to work with ASD were reflected. Demographics and referral sources of parents, and other details of their experiences, were surveyed. Perceived changes to the use of CST were explored through analysis of responses to both the Likert scale as well as the open comments.

CONCLUSIONS:

This preliminary study introduces the concept of CranioSacral Therapy as a treatment option for symptoms associated with ASD. Its clinical use has been available for three decades but few empirical studies exist. The results of the survey suggest that CST is already being professionally recommended as a treatment. This study found that there were positive responses observed by all 3 targeted groups leading to the authors concluding that there is worthy cause to further investigate how CST benefits Autism Spectrum Disorders (ASD)."