Upledger Institute Case Study CranioSacral Therapy – Postconcussion/Headaches/Pain By Amy Sanders, O.T.R., LMT, CST-T

Initial Evaluation 9/12/17

This 38 y/o client (E.R.) was referred to therapy for management of post-concussion symptoms and acute post-traumatic headaches following a MVA 3/11/17.

The author who participated in the NFL Concussion Study at the institute desires to further understand and provide case reports of the efficacy in using CranioSacral Therapy for postconcussion symptoms including head and cervical pain, dizziness, thought clarity, sensory overload.

Through use of CranioSacral Therapy, the therapist will decrease tension within the intracranial membranes and throughout the dural system, encourage the CSF flow and balance and remove toxins within the system.

Literature to support:

CranioSacral Therapy and Visceral Manipulation: A New Treatment Intervention for Concussion Recovery

Wetzler Gail, Roland Melinda, Fryer-Dietz Sally, and Dettmann-Ahern Dee. Medical Acupuncture. August 2017, 29(4): 239-248. <u>https://doi.org/10.1089/acu.2017.1222</u>

CranioSacral Therapy and the Treatment of Post Concussion Syndrome http://www.upledger.org/docs/CranioSacral-Therapy-and-Concussion-Mariann-Sisco-for-FSMTA-Dec-2014.pdf

Purpose:

To use CST as an intervention for post-concussion symptoms with decrease in objective and subjective symptoms of system disregulation, imbalance and pain.

History:

Client is a self-employed female, and owns her own real estate company. She comes to therapy unable to pay due to inability to work. Therapist agrees to see her pro bono for 7 visits including her initial evaluation.

She has minimal PMH to include tonsillectomy. Current mediations are vitamin supplements including B6 and B2, and melatonin.

Physical symptoms at time of evaluation are Head pain at level 7 on the numeric pain intensity, Score of 69 on the HIT 6 Questionnaire. Jaw pain at level 3 L greater than R. She also reports daily Low back pain and bilateral knee pain.

Symptoms of dizziness are daily, and measured at 70 on the Dizziness Handicap Questionnaire.

Pt. verbalizes visual disturbances and hearing sensitivity.

Functionally, she is unable to work greater than 2 hours per week. A decrease in sleep pattern at greatest 5 hours per night and social seclusion has occurred since May. Beck Depression Inventory score is 27 (moderate depression).

ROM : Cervical Flexion 20 Extension 45 Sidebend L 13 R 15 Rotation L 40 R 42 Thoracic WFL Lumbar SB 10 Bilaterally, able to reach floor in flexion

Manual Assessment:

Hypertonus psoas, resp. diaphragm, SCM, Trapezius, Paraspinals. Cranial Assessment decreased SQAR R occipital and temporal rotation, L lateral shift sphenoid. Specifically, decreased amplitude occipitals, temporals and parietals. Therapy today 30 mins.

Evaluation and explanation of CST.

Treatment included Respiratory diaphragm, thoracic inlet, OCB releases, and temporal balancing.

Plan:

6 consecutive visits 1x/wk for 6 wks. 60 minute sessions of CST.

9/21/17

Pt reported less foggy thoughts since last treatment. Improved sinus opening, with less congestion. Reports fatigue today with LBP, B knee pain and cervical pain.

Pt presents with R anterior pelvic rotation and decreased quality and symmetry cranially.

Session was 60 mins. Released pelvic diaphragm, thoracic inlet. During Thoracic inlet pt. reported hard palate sensation of restriction. Therapist performed intra oral balancing and releasing of vomer, and maxillary/sphenoid.

A connection of sensation was reported during treatment into R arm, sinus system, and hard palate.

Moderate compression of OCB, R compression sphenoid, maxillary torsion R, vomer R sidebend.

Pt reported nausea post treatment, with relief of symptoms in system.

9/28/17

Client reports less pain in neck and hips, and is hopeful for more sleep at night. Thoughts are more clear and less foggy. Decreased SQAR and fascial glide throughout L side. Temporal asymmetry R anterior rotation, OCB compression, vomer L lateral shear, R sphenoid compression. Session was 60 mins with opening of respiratory diaphragm, thoracic inlet, OCB release, SBJ balancing, vomer release and balancing, L/S decompression

Pt demonstrated overall systemic improvement of SQAR and balance. SER processing over anxiety symptoms and fear of not being able to get well.

10/12/17

Pt reports improved ability to focus on work tasks now able to work 2-4 hours per day. She reports that her mood is beginning to feel more stable. Reports cervical stiffness and pain in lower back and knees today, however the low back pain and knee pain is now bearable and intermittent vs. constant.

Decreased cranial amplitude, sacral torsion, mod-max OCB compression, L lateral shear and compression of maxilla.

OCB release with hard palate correction, connection into abdomen and sacrum. Pelvic diaphragm, maxillary sphenoid balancing.

SER processing on "the body's ability to take care of itself."

Noted sinus opening and cranial opening after maxillary/sphenoid balancing, Less LBP after treatment.

10/19/17

Client reports ability to tolerate multi stimuli conference event for 6 hours. Performed well at an "Intense work meeting" with clear thoughts 10/17/17. Noted quite fatigued after the day physically and cognitively. Reports feeling more positive and hopeful about the new abilities with daily work and social activities.

C/O Low back/sacral pain today, fatigue, and mild nausea.

Pelvic diaphragm release, thoracic inlet release, OCB, front tooth unwinding, maxillary balancing.

Client noted connection into belly, felt a steel rod from front right tooth to behind right eye.

R supra scapular releases connected intracranially. Left session without pain

11/17/17

Pt reports illness recently and that is why she has not been present for therapy.

Tolerating work activities more due to improved focus approximately 6-8 hours broken up with rest.

Sleep is still affected due to low back pain.

Notes L ear vibration with overstimulating environment. Social interaction is much improved and uses ear plugs to decrease auditory stimuli.

More clarity in thought during business meetings and the ability to multi task.

Utilizing emotional management tools and mindfulness exercises and they are proving to be helpful for symptoms. She notices that by connecting in the body she can manage her symptoms. She still feels like her body is "screaming for help."

60 minute treatment

arced to left knee, sacrum

pelvic diaphragm release with noted R anterior rotation and pelvic shear

This led to symptoms in her hard plate as described by her gums and the roof of her mouth.

Thoracic inlet was opened with verbalized brain massage or opening. OCB checked with minimal restrictions.

Maxillary sphenoid R lateral shear corrected, bilateral zygoma releases with release of sacrum.

Client felt relaxed and voiced decreased sacral pain and improved brain thoughts and decreased brain fog after treatment.

11/26/17

35 min treatment 25 min final assessment Client reports neck, low back and bilateral knee tightness and pain. Postural assessment in standing noted R upslip and R scapular elevation pattern.

Arched to sacrum

Lumbosacral decompression with anterior psoas releases. Client noted abdominal twisting and connection to hard palate and gums. Her symptoms of nausea were exaggerated during release. Dialog around this gained awareness of a deep twist that runs throughout the dural system to the hard palate. Therapist then rebalanced maxillary sphenoid and released the maxilla with an external thumb and index finger placement around top teeth on lateral sides. Knee, low back and cervical is reported decreased after treatment, along with decreased head pressure.

Final assessment 11/26/17

Client reports significant gains from CranioSacral Therapy over the last 6 sessions.

Headaches reported at level zero.
Brain "fogginess" is gone and symptoms are reported at level zero with description of the veil being removed.
Visual symptoms 80 percent resolved per subjective report
Hit 6 Headache impact inventory score 51 (initial 69)
Dizziness Handicap Inventory score 42 (initial 70)
Beck Depression Inventory score 6 (initial 27)

Cervical ROM Flexion 28 (norm 50) Extension 45 (norm 60) Sidebend R 30 (norm 45) Sidebend L 22 (norm 45) Rotation R 65 (norm 80) Rotation L 55 (norm 80) Client reports social interaction in stimulating environments is improving and when presented now with opportunity she takes it.

Jaw pain reported at level 1

Tolerating work for 4 hours with self-care breaks and a rest after the four hours. She reports her skills become inefficient after 4 hours without the rest.

Client is reporting sleeping for 5 hours at night.

Challenges that continue are:

Hearing hypersensitivity as described by client as a "blown speaker" -(audiology therapy starting this week)

Mild cervical pain especially with overhead activities requiring cervical extension

Working greater than 4 hour periods without rest.

Intermittent knee and low back pain, which disrupts long sleep cycle.

Discussion

The purpose of this case study was to underline the benefits of receiving CranioSacral Therapy for post-concussion symptoms, which are varied in each client.

The limitations in this study would have been to treat weekly ongoing without a break before the last session. This was unavoidable due to illness.

Therapist also feels client would have benefitted from 2-4 more sessions for resolution of cervical pain and decrease of sensory overload symptoms.

Therapist feels there needs to be ongoing assessment of utilizing CranioSacral therapy post-concussion as a modality for treatment as this epidemic continues to cause lifelong functional limitations in children and adults.

This case study was about the use of CranioSacral Therapy for symptoms diagnosed as post-concussion syndrome after a motor vehicle accident.

Symptoms range from each client due to injury type, location, health of body before the injury occurred both physically and emotionally, and force/velocity during injury.

In most cases of post-concussion symptoms can range from visual and auditory disturbances, dizziness, sensory overload, head pain, cervical pain, depression, decreased sleep, anxiety, body pain, heightened emotionality, increased fight/flight/freeze neurological response.

This client was treated for 7 sessions including evaluation and re-evaluation of symptoms. She is an active 38-year-old female who lives independently, and owns her own real estate company.

Each session was 60 mins in length using CranioSacral Therapy techniques for treatment of symptoms.

The results of this study are as follows:

Improved score in Headache Intensity HIT6 Improved score in Dizziness Handicap Improved score on Beck Depression inventory Improved subjective pain reports in head, cervical spine and lumbar spine Reported improved ability to tolerate work activities Reported improved ability to socialize in stimulating environments Reported increase in clear thought and attention to task Reported improved hours of sleeping through the night

Measured improved cervical ROM

In this case, due to consistent reproduction of symptoms in maxilla therapist feels there was a dural restriction and intracranial imbalance within the system.

PT Classroom Hope for the retired athletes <u>http://www.upledger.org/docs/PT-Classroom-Hope-for-the-</u> <u>Treatment-of-Retired-Athletes.pdf</u>

Concussion and post concussion syndrome <u>https://www.iahe.com/docs/articles/CST and Concussion Art</u> <u>icle - Chernick, Massage Therapy Canada.pdf</u>

Upledger Ricky Williams NFL Concussion Study http://www.upledger.org/docs/Game-On-Concussion-Pilot-Program-Results.ppt