Clinical Practice Guideline: **Sacro-Occipital Technique (SOT)™**

Date of Implementation: **July 13, 2006**

Product: **Specialty**

GUIDELINES

American Specialty Health – Specialty (ASH) considers Sacro-Occipital Technique (SOT)™, purported to affect cerebrospinal fluid (CSF) flow, as unproven due to insufficient evidence in the scientific literature to support clinical effectiveness.

For more information, see ASH *Techniques and Procedures Not Widely Supported as Evidence Based (CPG 133 – S)* clinical practice guideline.

Patients must be informed verbally and in writing of the nature of any procedure or treatment technique that is considered experimental/investigational or unproven, poses a significant health and safety risk, and/or is scientifically implausible. If the patient decides to receive such services, they must sign a *Member Billing Acknowledgment Form (*for Medicare use *Advance Beneficiary Notice of Non-Coverage form*) indicating they understand they are assuming financial responsibility for any service-related fees. Further, the patient must sign an attestation indicating that they understand what is known and unknown about, and the possible risks associated with such techniques prior to receiving these services. All procedures, including those considered here, must be documented in the medical record. Finally, prior to using experimental/investigational or unproven procedures, those that pose a significant health and safety risk, and/or those considered scientifically implausible, it is incumbent on the practitioner to confirm that their professional liability insurance covers the use of these techniques or procedures in the event of an adverse outcome.

DESCRIPTION/BACKGROUND

Sacro-Occipital Technique (SOT)™ represents a variety of diagnostic and therapeutic procedures. SOT is predicated upon the existence of what proponents call the "cranial sacral respiratory system." This system is said to exhibit regular respiration-like oscillations that are transmitted through the dura and thereby affect the flow of cerebrospinal fluid. Proponents believe SOT affects a wide range of neurological and other functions. They also posit the existence of a variety of complex motions among osseous and other structures of the skull that may affect health. The central therapeutic procedure employed is pelvic and spinal blocking. Padded, wedge-shaped blocks are placed under the pelvis and/or spine in order to affect desired changes in spinal alignment and motion (Cooperstein & Gleberzon, 2004).

Major Bertrand DeJarnette, DC, DO developed SOT in 1925. Dr. DeJarnette appears to have based his system on the Osteopathic Cranial Technique developed by W.O. Sutherland, DO. The origins of the currently popular CranioSacral Therapy™ of John Upledger, DO, can also be linked to Sutherland's techniques as well as to SOT.

EVIDENCE REVIEW

There is literature published by SOT practitioners that describes the techniques and rationale for SOT. However, almost none of the literature evaluates the diagnostic or therapeutic claims of this technique. There are no clinical trials, cohort studies, or clinical case series involving more than five patients. The case studies reported do not permit any conclusions to be drawn concerning the clinical effectiveness of SOT. A series of reliability studies were performed to evaluate the intra- and inter-examiner reliability of 15 different diagnostic tests employed in the SOT system (Leboeuf, 1991). Overall these tests performed very poorly. The author concluded, "It appears unlikely that SOT tests can be reproduced to a sufficiently high degree to constitute useful clinical procedures." Other reliability studies evaluating the cranial suture palpation procedures (Rogers et al., 1998; Wirth-Pattullo & Hayes, 1994; Hanton et al., 1998; Moran and Gibbons, 2001; Sommerfeld et al., 2004) also failed to demonstrate any clinically useful procedures. There is no scientific evidence supporting the underlying theories of cranial sacral respiration and related phenomena that underlie the SOT system (Bordoni et al. Part 1 and 2, 2020).

The application of SOT diagnostic or therapeutic procedures does pose safety risks. Particularly with respect to the unconventional diagnostic system used by SOT, there is a risk of substitution harm of valid diagnostic tests and diagnostic conclusions being abandoned in favor of the SOT system.

References

Blum CL. Chiropractic Technique Summary: Sacro-Occipital Technique (SOT). 2011: Retrieved on July 27, 2023 from http://www.chiroaccess.com/Articles/Chiropractic-TechniqueSummary--Sacro-Occipital-Technique-SOT.aspx?id=0000291

Bordoni B, Walkowski S, Ducoux B, Tobbi F. The Cranial Bowl in the New Millennium and Sutherland's Legacy for Osteopathic Medicine: Part 1. Cureus. 2020 Sep 12;12(9):e10410. doi: 10.7759/cureus.10410

Bordoni B, Walkowski S, Ducoux B, Tobbi F. The Cranial Bowl in the New Millennium and Sutherland's Legacy for Osteopathic Medicine: Part 2. Cureus. 2020 Sep 14;12(9):e10435. doi: 10.7759/cureus.10435

Cooperstein, R., Gleberzon, B. Chiropractic system techniques: sacro-occipital technique (SOT). In *Technique systems in chiropractic*. (pp. 209-220). London: Churchill Livingston; 2004

Hanten WP, Dawson DD, Iwata M, Seiden M, Whitten FG, Zink T. Craniosacral rhythm: reliability and relationships with cardiac and respiratory rates. *J Orthop Sports Phys Ther*. 1998;27(3):213-218. doi:10.2519/jospt.1998.27.3.213

Leboeuf C. The reliability of specific sacro-occipital technique diagnostic tests. *J Manipulative Physiol Ther*. 1991;14(9):512-517

Moran RW, Gibbons P. Intraexaminer and interexaminer reliability for palpation of the cranial rhythmic impulse at the head and sacrum. *J Manipulative Physiol Ther*. 2001;24(3):183-190

Rogers JS, Witt PL, Gross MT, Hacke JD, Genova PA. Simultaneous palpation of the craniosacral rate at the head and feet: intrarater and interrater reliability and rate comparisons. *Phys Ther*. 1998;78(11):1175-1185. doi:10.1093/ptj/78.11.1175

Sacro Occipital Research Society. Retrieved on August 11, 2023 from https://sorsi.com/sot-methods/

Sommerfeld P, Kaider A, Klein P. Inter- and intraexaminer reliability in palpation of the "primary respiratory mechanism" within the "cranial concept". *Man Ther*. 2004;9(1):22-29. doi:10.1016/s1356-689x(03)00099-7

Wirth-Pattullo V, Hayes KW. Interrater reliability of craniosacral rate measurements and their relationship with subjects' and examiners' heart and respiratory rate measurements. *Phys Ther*. 1994;74(10):908-920. doi:10.1093/ptj/74.10.908