

## Alleviating Ear Infections Through Craniosacral Therapy

Written and Illustrated by Tad Wanveer, L.M.B.T., C.S.T.-D.

MASSAGE Magazine

July 26, 2010

Craniosacral therapy can help children overcome ear infections by improving Eustachian tube (ET) shape. As ET shape improves, substances can then flow through the tube more easily. Blockage or congestion of the ET is a frequent cause of ear infections because harmful material can collect inside the middle ear. The middle ear is a small cavity within the bone that makes up the side of the head (called the temporal bone). It has three minuscule bones inside it that transmit sound to the inner ear, and then the inner ear sends sound to the brain. The ET is a tiny tube connecting the middle ear to the back part of the upper throat. It drains fluid and mucus out of the middle ear; stops substances like bacteria or viruses from getting into the middle ear from the throat and helps to balance air pressure between the middle ear and the atmosphere.

When the ET is blocked or congested, then the middle ear can become infected, inflamed or swollen. This frequently causes difficulty hearing and other problems like ear pain, tiredness, irritability, fever, headache and restlessness. Chronic ear infections may be related to speech, language and learning disabilities, plus over time they can excessively strain the immune system. Part of the ET is made of bone and the other part is cartilage. The cartilaginous part of the ET travels in a small groove where the temporal bone meets a midline bone of the skull (called the sphenoid bone). The ET is tiny, flexible and quite vulnerable to strain patterns of either of these bones or to other bones of the skull or the jaw. After passing along the small bony groove, the ET pokes through the back part of the upper throat, about in line with the nostrils. The throat is a tube of muscle and mucous membrane. It is attached to the sphenoid and another midline bone of the skull (called the occiput), and it has many other attachments as it extends downward to join the esophagus and trachea. Some of the attachments are to the cranium, palate, hyoid and spinal column. Adverse

strain of any of these structures can travel to the ET and may alter its normal shape. Three muscles attach to the ET: two of them attach to the soft palate and the third attaches to the upper throat.\* They help to open the ET during swallowing and yawning. Imbalances of any of these muscles, or adverse strain of the palate or throat, can cause ET compromise. In addition to motion caused by its attachments, the ET is moved in synchrony with the craniosacral rhythm. The craniosacral rhythm is an ongoing minute expansion and contraction of every part of the body, including the ET. This motion is continually massaging the ET, minutely stretching and opening it, and then slightly squeezing it. This helps to free the ET of restrictions and pumps substances through the ET, thus helping it decongest. If there is any compromise of the craniosacral rhythm, then the ET may not be efficiently massaged or pumped.\*\* The ET is imbedded within bone, muscle and other tissue. So if the tissue of the head, face or throat is not in its best position or cannot move in a balanced way, then the flexible part of the ET can become twisted or pulled into an abnormal shape. This can partially (or fully) block the ET, which might prevent mucus and debris from flowing out of the middle ear or through the ET.

There are a number of reasons why young children tend to have more ear infections than older children. It's harder for a child's ET to drain, especially before the age of 6, because the angle of a child's ET is less than an adult's. The ET is like a drainpipe; the steeper the angle, then the easier it is for substances to flow through it. The cartilaginous part of a young child's ET is more flexible than an older child's, so it's easily squished or twisted. Also, the mastoid processes have not fully formed. They have air cells within them that are connected to the middle ear. These air cells and the ET help to equalize air pressure between the middle ear and the atmosphere. Ear infections can cause pain as well as compromise a child's ability to hear, speak, move, read and pay attention. Craniosacral therapy is a gentle method of freeing a child's ET of obstruction or congestion, which can promote drainage of substances out of the middle ear and relieve excessive pressure from inside the middle ear. As this happens, an ear infection can resolve more easily and the middle ear can work normally, thus leading to improvements in hearing and other problems caused by ear

infection. \* The three intraoral muscles attaching to the cartilaginous part of the ET are the tensor veli palatini, the levator veli palatini and the salpingopharyngeus. \*\* The craniosacral rhythm, which is felt as a slight expansion and contraction of the entire body, is created by the craniosacral system. The craniosacral system consists of layers of fascia surrounding the brain and spinal cord, and cerebrospinal fluid (CSF). CSF is continuously draining out of the craniosacral system to join the general circulation. It is created within the brain by four interconnected cavities, called ventricles. The ventricles produce CSF in continuous cycles in which it is made for a few seconds, and then not made for a few seconds. While CSF is being produced, the craniosacral system slightly expands because there is more fluid within it. On the other hand, when CSF is not being produced, the craniosacral system contracts because there is less fluid within it. These brief periods of expansion and contraction generate a rhythmic motion within the craniosacral system and throughout the entire fascial system. In turn, the fascial system moves every part of the body because each cell is surrounded by fascia. The craniosacral rhythm can become altered when the craniosacral system is abnormally stressed. When this happens, the brain, spinal cord and the entire body will be affected in various ways and to varying degrees, such as less massage of the ET.

## References

Gray, Henry, F.R.S., Gray's Anatomy, The Classic Collector's Edition, Gramercy Books, Avenel, New Jersey, 1977. Liem, Torsten, Cranial Osteopathy, A Practical Textbook, Eastland Press, Seattle, Washington, 2009. Moeckel, Eva, D.O., M.R.O., M.S.C.C., and Mitha, Noori, D.O., M.R.O, Textbook of Pediatric Osteopathy, Elsevier Limited, London, England, 2008. Moore, Keith, L., et al, Clinically Oriented Anatomy, Sixth Edition, Lippincott Williams and Wilkins, Baltimore, Maryland, 2010. Schuenke, M.D., Ph.D., et al, Thieme Atlas of Anatomy, Head and Neuroanatomy, Georg Thieme Verlag, Stuttgart, Germany, 2007. Sergueef, Nicette, D.O., Cranial Osteopathy for Infants, Children and Adolescents, A Practical Handbook, Elsevier Limited, London, England, 2007. Sutherland, W.G., D.O., Teachings In The Science Of Osteopathy, Sutherland

Teaching Foundation, Inc., 1990. Upledger, John E., D.O., F.A.A.O. and Vredevoogd, Jon D., M.F.A, Craniosacral Therapy, Eastland Press, Seattle, Washington, 1983.

Tad Wanveer, L.M.B.T., C.S.T.-D., is a licensed massage/bodywork therapist and is diplomat certified in craniosacral therapy (CST). After graduating from the Swedish Institute, College of Health Sciences in New York City in 1987, he established a private practice in New York City. In 1993, he began specializing in CST.

<https://www.massagemag.com/alleviating-ear-infections-through-craniosacral-therapy-7673/>