

Pain Management with Auricular Therapy/Auricular Acupuncture

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Objectives

- Overview of history of acupuncture
- Review of types of acupuncture
- Discuss history and significance of Auricular Acupuncture
- Review particulars of auricular therapy
- Case presentations

Disclosures

- The views expressed in this presentation are those of the author and do not reflect the official policy of the Department of the Veterans Affairs, Department of Defense, or U.S. Government.

Traditional Chinese Acupuncture (TCM)

- First developed in China over 2000 years ago
- Yellow Emperor's Inner Classic- earliest major medical source dating back to 206 BC- 220 AD¹
- Meridian based - Seeks to restore harmony and balance- Qi, or energy, travels along 12 main pathways or meridians within the body
- Health is influenced by the quality, quantity and balance
- Diagnosis made by taking pulses, observing patient's appearance, demeanor and tongue and physical exam
- Qi is profoundly disturbed by traumatic stress



Loss and gain of acupuncture

- 1822- Qing Emperor ordered to stop teaching acupuncture at Imperial Medical college
- China was exposed to the advances of western medicine
- 1949- Rise of Mao Zedong- pushed out "Barefoot Doctors" - they were taught basic Chinese and western medicine to treat emergencies, simple illness and injuries/provided inexpensive medical care to rural china¹

Resurgence of acupuncture in the U.S.

- 1971- Front page of NY Times, James Reston reported on his emergency appendectomy in China- post op pain relieved by 3 needles²
- 3 months later a report in Journal of American Medical Association- gave a favorable report on the use of acupuncture for surgical anesthesia³
- NIH sponsored physicians to study Chinese health care and research acupuncture⁴

Different Types of Acupuncture

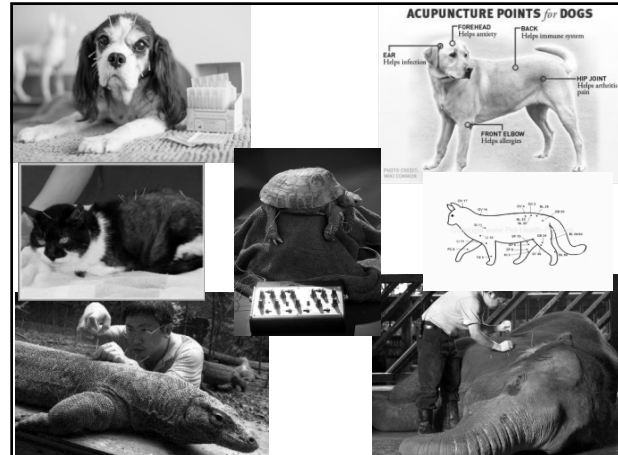
- Traditional Chinese Acupuncture (TCM)
- Medical Acupuncture
- Japanese Acupuncture
- Korean Hand Acupuncture
- Scalp Acupuncture
- Auricular Acupuncture and Auriculotherapy
- Veterinary Acupuncture

Medical Acupuncture

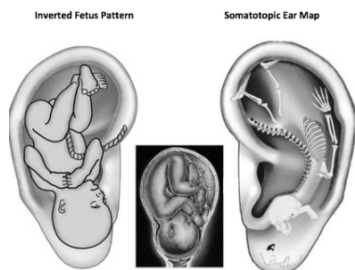
- Simplified version of TCM frequently addresses more acute issues.
- 300-500 hours of training.
- Physician, Nurse Practitioners and Physician Assistants using this modality.
- Added treatment modality in Western medicine –gaining momentum in military and VA facilities for pain treatment, PTSD/mood disorders, head injury

Additional Types of Acupuncture

- Japanese Acupuncture: uses thinner, fewer needles sometimes only touching needle to skin surface and/or only using one needle
- Korean Hand Acupuncture: utilizes the hand as a homunculus/microcosm representation of the entire body. Uses needles or taping of specific points
- Chinese Scalp Acupuncture (CSA): uses the scalp as the microcosm – especially effective for motor and spinal impairment
- Veterinary Acupuncture: used on animals of all kinds – requires special training, very effective



History of Auriculotherapy



Earliest use

- Egypt, Greece and Rome 500 BC to 100AD- Hippocrates and Galen used ear rings and other forms of ear stimulation
- Persians in 200AD after the fall of Rome, recorded cauterization for sciatica pain
- 1500 to 1700 the Dutch East India Company, brought Chinese acupuncture back to Europe, to include ear acupuncture and the development of the hypodermic needle (from the acupuncture needle)
- 1957 Dr Paul Nogier (French) noticed scarring on patients ears, which was for the treatment of sciatica. His research lead to his development of the somatotopic map (based on the idea of a inverted fetus) on the ear. His work was presented in France, published in German and then in Chinese⁵

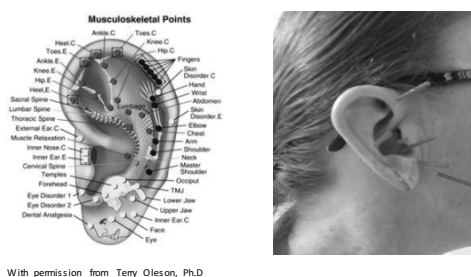
Earliest use (continued)

- 1958 the Chinese learned of DR Nogier's charts and verified the accuracy of the points. The "Barefoot Doctors" were taught these skills to bring health care to the Chinese population⁵
- 1980-Dr Terry Oleson from UCLA verified the scientific accuracy of the auricular diagnosis- had 75% accuracy of diagnosing the disease by evaluating the ear⁵
- 1990 WHO standardized the terminology⁵

Auriculotherapy/Auricular Acupuncture

- Utilizes the ear as a homunculus/microcosm representation of human body with specific corresponding acupuncture points on ear
- Embryological development of the ear allows access to brain and subsequently the body organs
 - Ectoderm- superficial tissue/skin, hair, teeth, peripheral nerves, spinal cord
 - Mesoderm- middle tissue/ muscle, bones, joints, blood vessels
 - Endoderm- deep tissue/ GI tract, lungs, internal organs
- Stimulation of nerve endings sends signals to the brain and then to the body
- By observing the ear one can identify specific issues/disease processes⁵

Auriculotherapy/Auricular Acupuncture



Auricular Points

Surface View of the Master Points

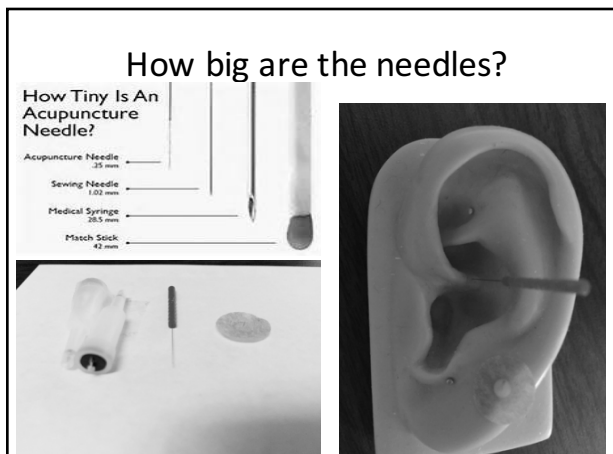


Auriculotherapy/Auricular Acupuncture (continued)

- Gained momentum with successful use as a treatment for substance abuse (NADA protocol) and more recently for PTSD, TBI, and battlefield use
- These points can be needled, seeded, electrically stimulated
- Can be learned in a matter of weeks
- Allows quick and easy access for treatment without patient needing to remove clothing
- Treatments take as little as 20 minutes and provide relief for days to weeks, sometimes resolving the problem
- Wide range of disorders to include headache, chronic back pain, asthma, allergic rhinitis, dental pain, anxiety, insomnia⁵

Easy Auricular Acupuncture Protocols

- National Acupuncture Detoxification Association (NADA)
 - Lung, Liver, Kidney, Shen Men, Autonomic Point
- Battlefield Acupuncture (BFA)
 - Cingulate gyrus, Thalamus, Omega 2, Point Zero, Shen Men
- Auricular Trauma Protocol (ATP)
 - Master Cerebral, Amygdala, Hypothalamus, Hippocampus, Insula, Vagus, Point Zero, Shen Men

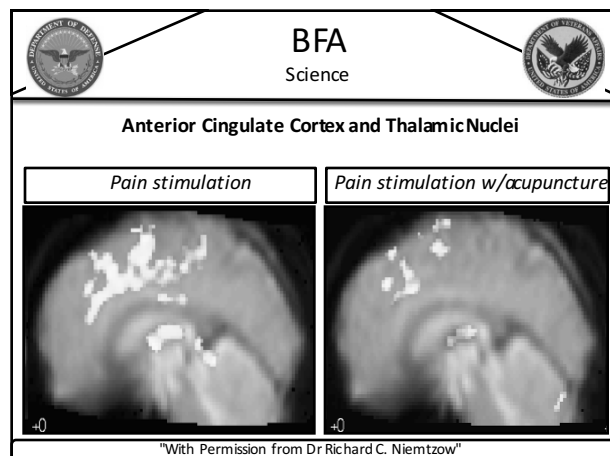


Research

- Efficacy in pain management: Meta-analysis of 13 studies on Auricular Therapy (Acupressure, Acupuncture and electroacupuncture) showed a greater decrease in pain score than sham or control group (1.59 standard deviations greater than the mean decrease for the sham control)⁷
- Pilot study of 87 active duty military personnel with acute pain- the acupuncture group showed a 23% reduction in pain versus the standard medical care group⁸
- Randomized exploratory study evaluated usual care, TCM and Auricular Acupuncture in the treatment of post concussive headaches on active duty service members. Both types of acupuncture improved headache related quality of life more than usual care⁹

Research

- A sub group of rats were stressed in order to induce depression- then divided into acupuncture, antidepressant, no treatment. The acupuncture group and antidepressant groups showed reduced glutamate in the hippocampus, prevented damage to hippocampal neurons and improved behavior¹⁰
- Clinical observation in the Temple VA headache clinic- I do not write narcotics, I use acupuncture on a daily basis to stop the headache pain, improve mood and help with sleep. Resulting in some very happy Veterans
- Further research is definitely needed, some of the difficulty is having a control group



Precautions

- Know what you are treating
- Do not relieve pain if it is needed to limit the patients activity
- Do not use during pregnancy
- Needle cautiously with bleeding disorders
- Do not use electric current with a cardiac pacemaker
- No ETOH, drugs before treatment

Precautions (continued)

- Avoid treating those that are extremely weak, anemic, tired, hungry or have eaten a big meal- treatment will not be effective
- Those that are weak after, need to rest before leaving
- Needle shock- vasovagal reaction (uncommon, but can happen)
- Treat with antibiotics if infection develops (very rare)
- Most common side effect is red or tender ear

Cost of Acupuncture

- The cost actually varies by the type of provider (physician vs "other" (NP)) and the type of Patient. The Price Quote : as of Jan 17th 2013. The rate tables are changed 1-2 times each year and rates do go up and down, usually only slightly.
- Price quote for acupuncture without stimulation**
- 97810- \$35.74 (Physician) \$30.38 (Extra Medical/NP) -first 15 minutes
- 97811- \$26.89 (Physician) \$22.86 (Extra Medical/NP) -additional 15 minutes
- Price quote for acupuncture with stimulation**
- 97813 - \$38.12 (Physician) \$32.40 (Extra Medical/NP) -first 15 minutes
- 97814 - \$30.63 (Physician) \$26.04 (Extra Medical/NP) -additional 15 minutes

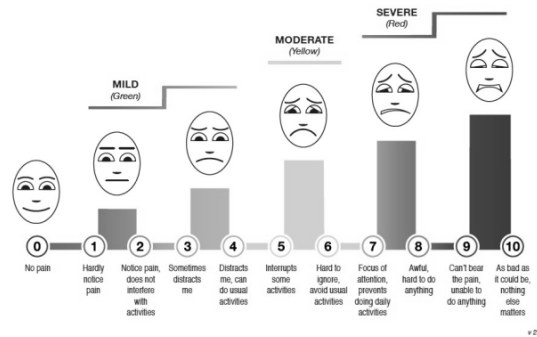
Great News!

- The Texas Board of Nursing has granted approval for use of Auricular acupuncture, if you have taken the appropriate courses. The use of auricular acupuncture does not overlap into the territory of the Licensed Acupuncturist, according to Texas Medical Board definition of acupuncturist.
- Possibility for learning this valuable skill
The Auriculotherapy Certification Institute www.auriculotherapy.org
*This certificate does not replace the need for state licensure in a specific health care field, but it does acknowledge specialty of training in this particular health care modality.

Case Presentations



Defense and Veterans Pain Rating Scale



Occipital neuralgia and neck pain

Chronic pain

History

- 40 year old male with a history of multiple concussions, neck and low back pain related to multiple deployments: to include hard landings with parachute jumps, head strikes on vehicles and multiple blasts from Identified explosive devices (IED)
- Chronic posterior occipital pain with jab and jolt forward behind the eyes. Occurring 2-3 times per week lasting 2 hours, rated as 7/10. Headaches have been occurring since 2006 (10 years)
- Prior treatments with acupuncture and massage to back helpful, not tolerant of Topamax, Robaxin- would prefer to stay away from medications
- Past medical history- Migraines, PTSD, Sleep Apnea, Insomnia, Low back pain, Neck pain, Tinnitus, GERD

Auricular Acupuncture treatment

- Placement of needles at the following points:
- Shen men, Amygdala, Master Cerebral, Vagus, Hypothalamus, Hippocampus, Thalamus, Cingulate gyrus, point zero, Cervical (Sensory & Motor), Lumbar (Motor)
- Pain prior to treatment: 7/10 neck and shoulders, mild occipital pain
- Anxiety prior to treatment: 6/10
- Needles left in for 20 minutes
- Pain after treatment: 4/10 neck and shoulders, occipital pain resolved
- Anxiety after treatment: 3/10

Occipital neuralgia and anxiety

Pre-procedure pain

History

- 38 yr old female with a hx of occipital neuralgia/tension headaches occurring since 1998- unsure of trigger other than was on active duty as a medic at time of onset. In addition had a medication overuse component to her current headaches (taking daily excedrin/Imitrex for 3 weeks)
- failed multiple medications to include paxil, celexa, nortriptyline, topamax, depakote, motrin
- Medical history- PTSD, Sexual assault in adolescence/ MST, Anxiety, Insomnia, Constipation, Allergic rhinitis, Asthma, GERD, Low back pain, Dizziness, Polyarthralgia
- Seen in clinic for trial of botox- at time of appt had a 5/10 headache located in the left occipital area radiating to behind her left eye. In addition she was extremely anxious about the administration of Botox. Rated anxiety as 10/10

Treatment

- Auricular acupuncture administered at the following sites: Tranquilizer, Shen men, Point zero, Amygdala, Hypothalamus, Hippocampus, Master Cerebral, Insula, Lesser occipital – needles left in for 20 minutes
- Alpha-stim AID (micro-current applied by way of ear tabs) was applied to help with anxiety
- Her headache resolved after 10 minutes and anxiety was reduced to 3/10
- She was able to complete the administration of Botox without issue, her headache did not return that day and her anxiety remained low

Dental pain

Acute pain

History and Treatment

- 51 yr old male with 3 day history of right sided jaw pain following root canal. Rates pain as 8/10, constant throbbing and distracting him from working
- Acupuncture needle placed at Dental analgesia point
- Pain resolved before my hand was away from his ear- pain did not return
- 75 yr old male with 2 day history left jaw pain following tooth extraction, "dry socket". Rated pain as 9/10, unable to eat or even brush his teeth
- Acupuncture needle placed at Dental Analgesia point x 2, Thalamus, Shen Men
- Pain resolved over 5 minutes- pain did not return

Dental Pain (continued)

- 35 yr old female with 10 days of left facial pain. Found to have infection in tooth, now needing dental surgery as the infection had surpassed the ability to do a root canal. In addition she was dx with sinus infection as tooth root was into the sinus cavity. Taking T&C#3 every 4 hours- reduced her pain to 5/10
- Placed auricular needles at Dental Analgesia, Jaw and Thalamus- pain resolved over 3 minutes. Needles removed and gold studs placed.
- Patient left pain free and happy, after being in the office a total of 10 minutes. Pain 0-2/10 for 3 days, no need to take T&C #3. Pain came back when gold studs fell out, needed to go back on T&C#3 until surgery as she could not get back in to the office.

Words of Wisdom

" Anyone who is trained and licensed to give injections or do sutures could learn to use a few simple acupuncture protocols in a matter of weeks, and could relieve an enormous amount of suffering." ¹¹

'Acupuncture is like Chinese noodles': community based acupuncture concept

References

1. Helms J. Acupuncture Energetics A clinical Approach for Physicians. New York: Thieme publishers, 2007: 3-17.
2. Reston J. Now about my operation in Peking. The New York Times, July 26, 1991: 1,6.
3. Diamond EG. Acupuncture Anesthesia: western medicine and Chinese traditional medicine. Journal of the American Medical Association, 218 1971: 1558-1563.
4. Chen JYR. Acupuncture. In Medicine and Public Health in the People's Republic of China. Edited by J.R. Quinn. U.S. Dept. of Health, Education and Welfare: National Institutes of Health, John S. Fogarty International Center. 1972: 65-90.
5. Oleson T. Auriculotherapy Manual: Chinese and Western Systems of Ear Acupuncture, 3rd edition. New York: Churchill Livingstone, 2003:2-19.

References

6. Oleson T, Kroening R, Bresler D. An experimental evaluation of auricular diagnosis: the somatotopic mapping of the musculoskeletal pain at ear acupuncture points. Pain 1980; 8:217-229
7. Yeh CH, et al. Efficacy of Auricular Therapy for Pain Management: A Systematic Review and Meta-Analysis. Evidence-Based Complimentary and Alternative Medicine 2014; 2014 1-14.
8. Goertz CM, Niemtzw R, Burns SM, Fritts MJ, Crawford CC, Jonas WB. Auricular acupuncture in the treatment of acute pain syndromes: A pilot study. Mil Med 2006 Oct 171(10): 1010-4.
9. Jonas WB, et al. A Randomized Exploratory Study to evaluate Two Acupuncture Methods for the treatment of Headaches Associated with traumatic Brain Injury. Medical Acupuncture 2016; 28:113-130.

References

10. Fan L, et al. Glutamate of Hippocampus Involved in Remission of Depression by Acupuncture in Rats. Medical Acupuncture 2016; 28:71-78.
11. Rohleder L, Et Al. Acupuncture is like noodles. Oregon: Working Class Acupuncture, 2009:122.

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