

Pain Management with Auricular Therapy/Auricular Acupuncture

Karen Williams, MSN, RN, FNP-BC (K1)
KDW Health Management

Karen Sova, MSN, RN, ANP-BC, COHN-S (K2)
National Institutes of Health

TNP 2017
BFA Workshop

Objectives

- Overview of history of acupuncture
- Review of types of acupuncture
- Discuss history and significance of Auricular Acupuncture/Auriculotherapy
- Review particulars of Auricular Acupuncture/Auriculotherapy
- Demonstrate Battlefield Acupuncture Protocol
- 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
- This course is for an introduction to auricular acupuncture only and is not for credentialing purposes. This course does not credential the participant to perform auricular acupuncture

Which One Am I Talking About?!

- Auriculotherapy
- Auricular Therapy
- Auricular Acupuncture

Auriculotherapy/Auricular Acupuncture Evolves with Chinese Acupuncture

- Meridian based medicine - Seeks to restore harmony and balance: **Qi - life force energy** - travels along 12 main pathways or meridians within the body
- **Qi is profoundly disturbed by traumatic stress**
- Historically evolved in China over 5000 years ago
- Yellow Emperor's Inner Classic- earliest major medical source dating back to 206 BC- 220 AD¹



History

(continued)

- China – isolated from rest of world because of internal feuding for power.
- 1800's- Outside trade and influx of Christianity and Western medicine
- 1822 - Qing Emperor orders teaching of acupuncture to stop at Imperial Medical college
- Restrictions on acupuncture continued resulting in the decline of traditional Chinese medicine.
- 1949 - Rise of Mao Zedong- poor rural healthcare created need for 'Barefoot Doctors'¹

Interest in Acupuncture Begins in the United States

- On a trip to China with President Richard Nixon, NY Times reporter, James Reston, suffered appendicitis
- 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 Association³
- National Institutes of Health sponsored physicians to study Chinese health care and research acupuncture⁴ (NICAM)

Different Types of Acupuncture

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

Description of 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
- Five Element Acupuncture: Meridian based – emphasizing connectedness to the universe and the ever changing seasons

Traditional Chinese Medicine (TCM)

- TCM Most common form of acupuncture in the US – uses the 12 meridians plus several 'curious' meridians that transverse the body
- All 12 meridians at some point pass through the ear
- Herbs as well as acupuncture can be used
- Diagnosis based on 8 principles:

YIN	YANG
Interior	Exterior,
Deficiency	Excess,
Cold	Heat

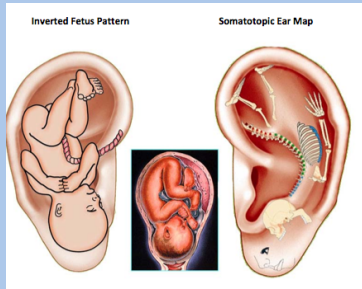
Medical Acupuncture

- 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
- National Institutes of Health – used as a wellness initiative for employees as well as pain management in occupational injury, stress management for work in high level containment labs and after deployment to work in emerging infectious disease areas.

Auriculotherapy/Auricular Acupuncture Theory

- Utilizes the ear as a homunculus/microcosm representation of human body with specific corresponding acupuncture points on ear
- 12 Meridians pass through ears
- Embryological development of the ear allows access to brain and subsequently the body 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

History of Auriculotherapy



With permission from Terry Oleson, Ph.D

Embryological Auricular Development and Areas of Influence

Embryological Divisions

Endodermal Tissue	Mesodermal Tissue	Ectodermal Tissue
Inner Tissue Layer	Middle Tissue Layer	Outer Tissue Layer
Stomach	Muscles	Skin
Small Intestines	Bones	Hair
Large Intestines	Tendons	Sweat Glands
Lungs	Ligaments	Peripheral Nerves
Tonsils	Heart	Spinal Cord
Liver	Blood	Brainstem
Pancreas	Circulatory System	Subcortical Brain
Bladder	Lymphatic System	Limbic System
Urethra	Kidneys	Cerebral Cortex

With permission from Terry Oleson, Ph.D

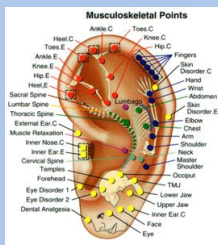
Early Documented Use of Auriculotherapy

- 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
- 1957 Dr. Paul Nogier (French) noticed scarring on patients ears, which was used for the treatment of sciatica⁵

Early Documented Use (continued)

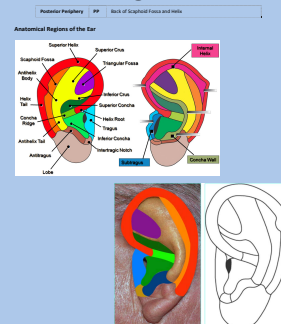
- 1958 the Chinese learned of Dr. Nogier's charts and verified the accuracy of the points⁵
- 1980 – Dr. Terry Oleson from UCLA verified the scientific accuracy of the auricular diagnosis⁶
- 1990 WHO standardized the terminology⁵
- 2001 Col. Richard Niemtow, MD, PhD develops 'Battlefield Acupuncture'

Auriculotherapy/Auricular Acupuncture

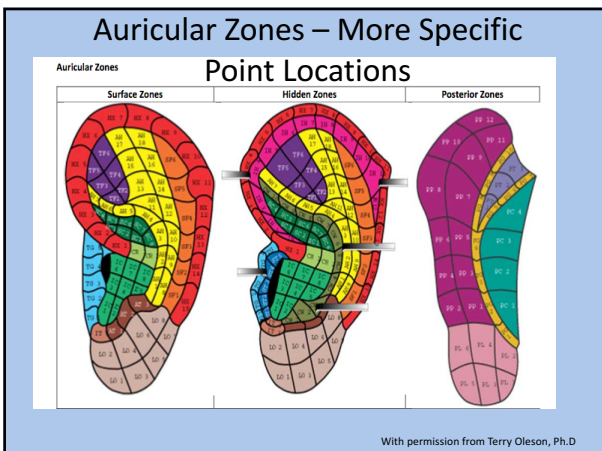


With permission from Terry Oleson, Ph.D

Anatomy of An Ear-A Guide to Finding the Points

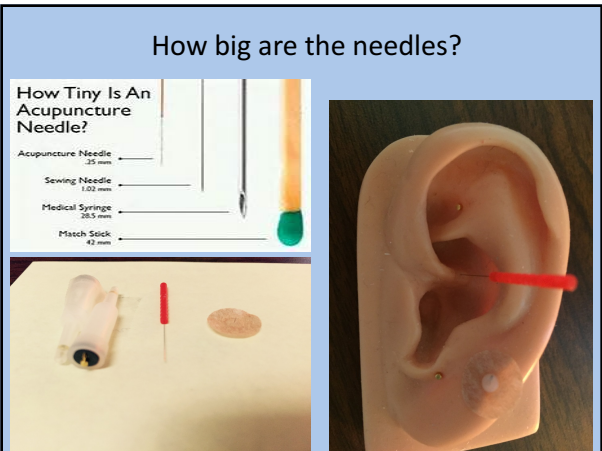


With permission from Terry Oleson, Ph.D



- ### Auriculotherapy/ Auricular Acupuncture use
- Treatment for substance abuse (NADA protocol) and more recently for PTSD, TBI, and battlefield use
 - Wide range of disorders to include headache, chronic back pain, asthma, allergic rhinitis, dental pain, anxiety, insomnia
 - Points can be needled, seeded, electrically stimulated
 - Allows quick and easy access for treatment
 - Treatments take as little as 20 minutes, provide relief for days to weeks
 - Easy to learn⁵

- ### 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 Men¹²

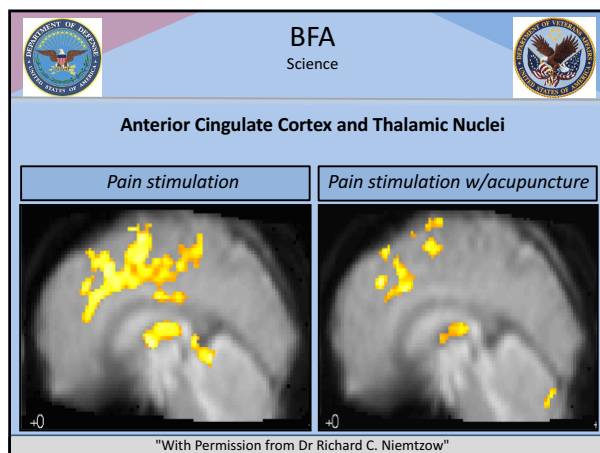


- ### Does It Work? - Research -
- Efficacy in pain management: Meta-analysis of 13 studies on Auricular Therapy (Acupressure, Acupuncture and Electro-acupuncture) showed a greater decrease in pain score than sham or control group⁷
 - Pilot study of 87 active duty military personnel with acute pain- the acupuncture group showed a 23% reduction in pain verses the standard medical care group⁸
 - Post concussive headaches in active duty service members. Randomized exploratory study evaluated: usual care, TCM and Auricular Acupuncture. Acupuncture improved headache related quality of life more than usual care⁹

- ### Research (continued)
- Rats were stressed in order to induce depression- 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- acupuncture used daily to stop the headache and general pain reduction, improve mood and help with sleep. No use of narcotics.
 - Clinical anecdotal observation at NIH – across the spectrum of diverse problems – success with pain reduction, muscle relaxation, lessening of acute presentations and improvement in sleep and stress reduction – no use of narcotics
 - Further research is definitely needed, some of the difficulty is having a control group.
- 24

Acupuncture Systemic Reviews

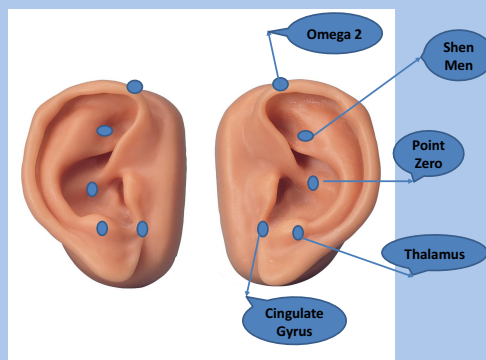
- NIH systemic review 2012
 - Acupuncture is effective for chronic pain treatment and can be considered a reasonable option
 - Chronic pain to include back and neck pain, osteoarthritis, chronic headache and shoulder pain¹³
- Cochrane systemic review 2016
 - Acupuncture should be considered for migraine patients for prevention, particularly if having adverse effects from medications
 - Acupuncture effect size was statically significantly larger in real acupuncture verses sham acupuncture for chronic headaches
 - Acupuncture should be considered for treating episodic or chronic tension headaches¹⁴



Battlefield Acupuncture protocol

- Cingulate gyrus
- Thalamus
- Omega2
- Point zero
- Shen Men

BFA Point Locations - CTOPS



Significance of Points/BFA

- **Cingulate gyrus**- memory and emotion with pain
- **Thalamus**- Communication of nervous system to cerebral cortex (Grand Central station), reducing shock, restoring tranquility
- **Omega 2** Psychosomatic d/o & pain in limbs
- **Point zero**- General body homeostasis/autonomic brain controlling visceral organs
- **Shen Men**- Parasympathetic switch, alleviates excessive sensitivity, calming, pain reduction, insomnia – supports other auricular reflex points

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

Procedure

- Consent (good for 1 year)
- Wash hands or use hand sanitizer
- Wipe ears with alcohol swap
- Access pain level prior to placement of needle

Patient Information and Consent Form for Acupuncture and Auriculotherapy

Please read this information carefully and ask your acupuncture provider if there is anything that you do not understand.

What is acupuncture?
Acupuncture is a form of therapy in which fine needles are inserted into specific points on the body. Auriculotherapy involves inserting needles on one or both ears.

Is acupuncture safe?
Acupuncture is generally very safe. Serious side effects are very rare – fewer than 1 in 10,000 treatments.

Does acupuncture have side effects?
Yes, the common side effects of an acupuncture treatment are listed below.

- Drowsiness may occur after a treatment. If you are so affected, you are advised not to drive.
- Minor bleeding or bruising may occur when the needles are removed.
- Indwelling ear needles can become painful or inflamed. If this occurs, promptly remove the needle(s) involved.
- Symptoms can get worse after a treatment. Be sure to tell your doctor about this at your next appointment.
- Fainting may occur in certain patients, particularly at the first treatment.

In addition if there are particular risks that apply in your case, your doctor will discuss these with you.

Is there anything your doctor needs to know?
Apart from the usual medical details, it is important to tell your doctor

- if you have ever become faint or had a seizure,
- if you have a bleeding disorder,
- if you are taking anticoagulants or any other medication,
- if you have a damaged heart valve or other cardiac problem,
- if you have any other particular risk of infection.

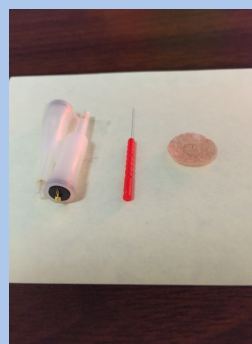
Only single-use, sterile, disposable needles are used in the clinic.

Statement of Consent

I confirm that I have read and understood the above information. I consent to having acupuncture treatment. I understand that I can refuse treatment at any time.

33

Needle practice



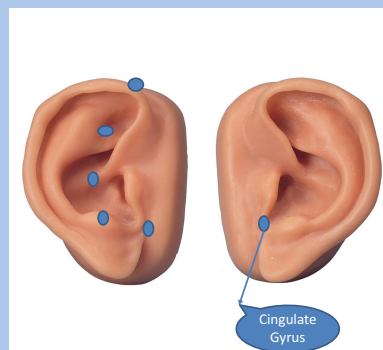
KDW Health Management LLC

Anatomy Differences



KDW Health Management LLC

BFA Cingulate gyrus



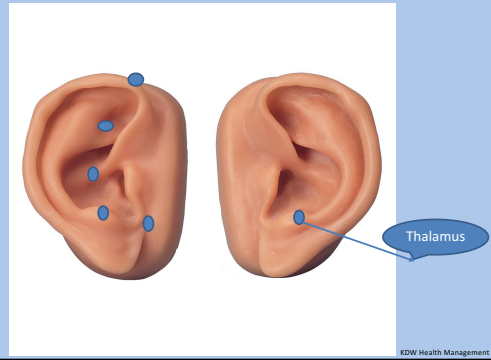
KDW Health Management LLC

Point Practice
Cingulate Gyrus



KDW Health Management LLC

BFA
Thalamus



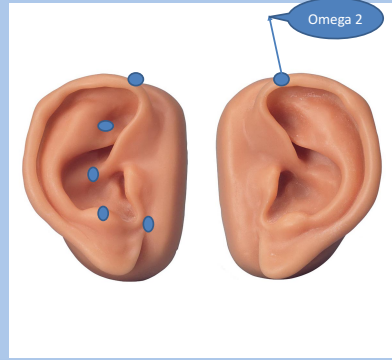
KDW Health Management LLC

Point Practice
Thalamus



KDW Health Management LLC

BFA
Omega 2



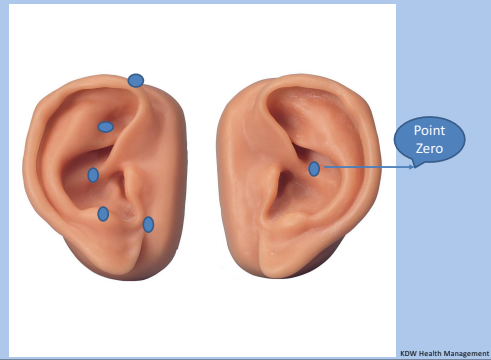
KDW Health Management LLC

Point Practice
Omega 2



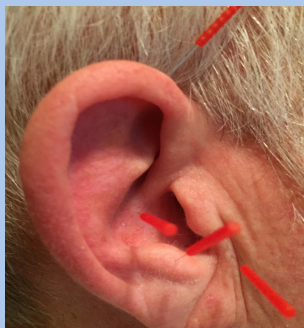
KDW Health Management LLC

BFA
Point Zero



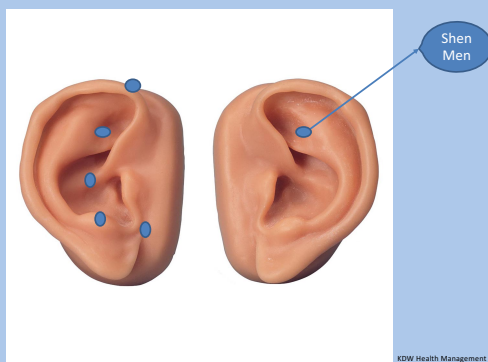
KDW Health Management LLC

Point Practice
Point Zero



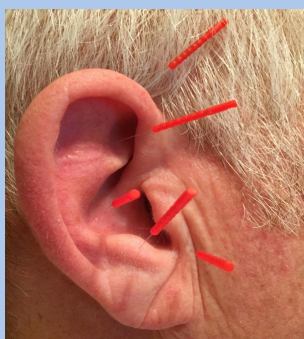
KDW Health Management LLC

BFA
Shen Men



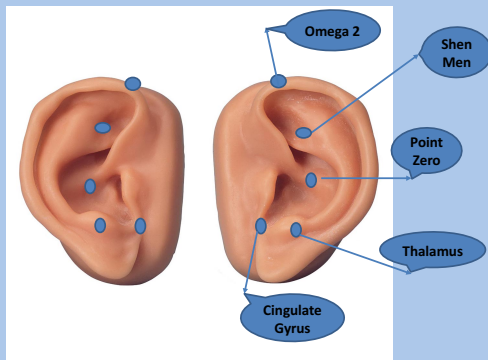
KDW Health Management LLC

Point Practice
Shen Men



KDW Health Management LLC

BFA
CTOPS



KDW Health Management LLC

Reasons to stop the treatment

- Patient asks
- Pain is at 0 – 1/10
- Lightheadedness



Patient Discharge Instructions

- Drink plenty of water
- Avoid strenuous activities for rest of day
- Avoid heavy meals
- Avoid alcohol and sex for 6 hours
- Continue medications as directed
- Monitor response to the treatment

Auriculotherapy Treatment Form

Right Ear
Left Ear
ATP

Indicate on pictures above those areas on ear where inactive ear reflex points were found

1. Patient I.D.: _____ 2. Date: _____ 3. Time: _____ 4. Time: _____

5. Patient Complaints Prior to Treatment: _____

6. Objective Body Assessments Prior to Treatment: (i.e. symptoms, limitations in range of motion) _____

7. Auricular Diagnosis Observations: (i.e. regions of tenderness and electrodermal conductance) _____

8. Auriculotherapy Treatments Used: Acupuncture Needles Transcutaneous Stimulation
 Electrostimulation Acupoint Pallet Acupressure Other _____

9. Auricular Points Treated: _____

10. Patient Experience Following Treatment: _____

11. Objective Body Assessments Following Treatment: _____

[For Office Use Only] Clinic ID: _____ Practitioner ID: _____
 © Copyright 1999. This permission to use this form may be granted by writing to Dr. Terry Olson at the following
 address: POB 2007-2013, Sunset Blvd., S.A., CA 90088. FAX: (323) 676-2048. E-mail: tso@auriculotherapy.com

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

Relative Value Unit (RVU) for acupuncture

Acupuncture without electric stimulation

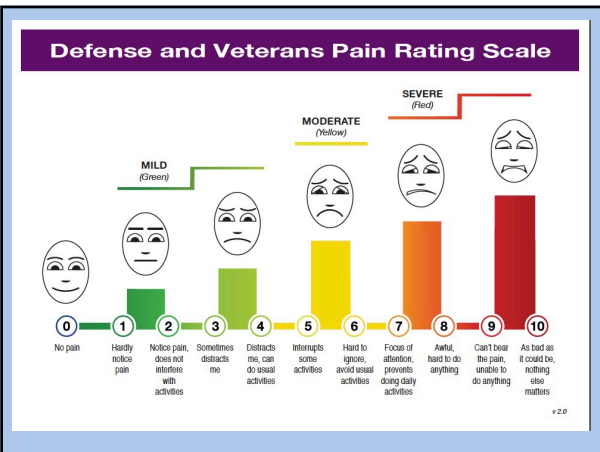
- 97810- 0.6 RVU's - first 15 minutes
- 97811- 0.5 RVU's -additional 15 minutes

Acupuncture with electric stimulation

- 97813 - 0.65 RVU's - first 15 minutes
- 97814 - 0.5 RVU's - 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.



Refractory Migraine

Failed treatment in ER

History and Treatment

- 38 yr. old female with a 2 weeks history of migraine
- Failed all abortive treatments of triptans and IV medication in the ER
- Placed BFA protocol bilaterally, for 20 minutes
- Resolution of the migraine

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.

Occupational Injury – Back Strain History

- 44 yr. old male helping to transport a 300lb. anesthetized pig back to pen when pig suddenly awoke and in the struggle that ensued the employee injured his back.
- Presents in acute pain, unable to find a position of comfort, unable to stand or sit, lying on side without relief.
- Healthy, alert male: No meds, NKA, PMH: NC
- Pain: 10/10 P: 96 BP: 156/84

Back Strain - Treatment

- NP and PT unable to exam employee in current state of pain – restless in fetal position
- Needled points BFA plus muscle relaxation, sacral and lumbar spine in only one ear – encouraged to deep breathe – cold pack to back
- In less than 5 minutes, suddenly pulled himself to the side of the bed, stood up still bending slightly forward and said (smiling) 'you're a witch' his pain had gone to 5/10 with increased mobility and ability to withstand further evaluation
P: 76 BP: 132/74
- Was able to treat with NSAIDs and Physical therapy with Auriculotherapy for added pain management. On light duty returned to full duty in 2 weeks.

Occupational Exposure – Allergy History

- 36 yr. old female presents with mild resp. distress after sustaining a mouse bite while moving the mouse to a different cage
- Employee was working with HP AI (High Path Avian Influenza) mouse had not been infected
- PMHx of seasonal and cat dander allergies. Meds: prn Loratadine – none taken in past 7 days
- P= 104 R=28 audible wheezing, BP=146/82

Allergy - Treatment

- Alert female begins 15 min. scrub of bite mark on right index finger
- While scrubbing, needles quickly placed in BFA in both ears and with allergy and antihistamine points bilaterally
- R=20 (no wheezing either audible or on auscultation) P= 76 BP=128/76 after 15 min. scrub with needles in place
- Oral antihistamine given. Employee able to return to work in an hour. Work-up for mouse allergies

Post Deployment Insomnia History

- 52 yr. old male in the U.S. Public Health Service recently returned from deployment in Africa during Ebola epidemic for 3months. He is unable to sleep through the night waking 5-6 times
- PMHx: Hypertension, hyperlipidemia
- Meds: Losartan 50mg qd, Rosuvastatin 10mg qd

Insomnia - Treatment

- First treatment: BFA in one ear and ATP (auricular trauma protocol) in other ear with Insomnia 1, Insomnia 2, in both. Left needles in for 45minutes. He fell asleep and reported he 'felt as if I haven't slept this well in months'
- Continued to have sleep disruption but only 3-4 times a night. After 2 similar treatments he was waking 0-2 times a night and stated felt 'less anxious'

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

Karen Williams, MSN RN FNP-BC

KDWHealthManagement@gmail.com

704-706-5519

Karen Sova, MSN, RN, ANP-BC, COHN-S

kmsova2@gmail.com

301-980-8062

73

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 Piking. *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 JYP. 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, Niemtow 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.
12. Robert L. Koffman, & Joseph M. Helms. (2013). Acupuncture and PTSD: 'Come for the needles, stay for the therapy'. *Psychiatric Annals*, 43(5), 236. doi:10.3928/00485713-20130503-09.
13. Vickers, A. J., Cronin, A. M., Maschino, A. C., Lewith, G., MacPherson, H., Foster, N. E., . . . Acupuncture Trialists' Collaboration. (2012). Acupuncture for chronic pain: Individual patient data meta-analysis. *Archives of Internal Medicine*, 172(19), 1444-1453. doi:10.1001/archinternmed.2012.3654.
14. Coeytaux, R. R., & Befus, D. (2016). Role of acupuncture in the treatment or prevention of migraine, tension-type headache, or chronic headache disorders. *Headache: The Journal of Head and Face Pain*, 56(7), 1238-1240. doi:10.1111/head.12857.