Pain Management with Auricular Therapy/Auricular Acupuncture
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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 AD

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’
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 needles
- 3 months later a report in Journal of American Medical Association
- National Institutes of Health sponsored physicians to study Chinese health care and research acupuncture (NICAM)

Different Types of Acupuncture

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

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:
  - Exterior/interior,
  - Deficiency/excess,
  - Cold/heat,
  - Yin/Yang

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 processes

Embryological Auricular Development and Areas of Influence

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 sciatica

Early Documented Use (continued)

- 1958 the Chinese learned of Dr. Nogier’s charts and verified the accuracy of the points
- 1980 – Dr. Terry Oleson from UCLA verified the scientific accuracy of the auricular diagnosis
- 1990 WHO standardized the terminology
- 2001 Col. Richard Niemtzow, 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

Auricular Zones – More Specific Point Locations

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 learn

With permission from Terry Oleson, Ph.D
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

How big are the needles?

Does It Work? - Research -

- Efficacy in pain management: Meta-analysis of 23 studies on Auricular Therapy (Acupressure, Acupuncture and Electro-acupuncture) showed a greater decrease in pain score than sham or control group

- 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 group

- 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 care

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 behavior

- 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.

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 pain

- Cochrane systemic review 2016
  - Acupuncture should be considered for migraine patients for prevention, particularly if having adverse effects from medications
  - Acupuncture effect size was statistically significantly larger in real acupuncture versus sham acupuncture for chronic headaches
  - Acupuncture should be considered for treating episodic or chronic tension headaches

BFA Science

Anterior Cingulate Cortex and Thalamic Nuclei

- Pain stimulation
- Pain stimulation w/acupuncture

"With Permission from Dr Richard C. Niemtzow"
**Battlefield Acupuncture protocol**

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

**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
- **Omega2**: 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**

- Verbal Consent for Auricular Acupuncture
- Wash hands or use hand sanitizer
- Wipe ears with alcohol swap
- Access pain level prior to placement of needle
Needle practice

Anatomy Differences

BFA
Cingulate gyrus

Point Practice
Cingulate Gyrus

BFA
Thalamus
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

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](http://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.
- Acudetox Specialist - NADA protocol 3 day class to be offered soon

### ACUDETOX Specialist

- OCCUPATIONS CODE; TITLE 3. HEALTH PROFESSIONS; SUBTITLE C. OTHER PROFESSIONS PERFORMING MEDICAL PROCEDURES; CHAPTER 205. ACUPUNCTURE
- "Acudetox specialist" means a person certified under Section 205.303.
- (A) is a licensed social worker, licensed professional counselor, licensed psychologist, licensed chemical dependency counselor, licensed vocational nurse, or licensed registered nurse; and
- (B) has successfully completed a training program in acupuncture detoxification that meets guidelines approved by the medical board; and
- (2) pays a certification fee in an amount set by the medical board.
- (b) An acudetox specialist may practice acupuncture only:
  - (1) to the extent allowed by rules adopted by the medical board for the treatment of alcoholism, substance abuse, or chemical dependency;
  - and
  - (2) under the supervision of a licensed acupuncturist or physician.

### Case Presentations

**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, Paint 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 Auriculartherapy 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 HPAI (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 3 months. 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 45 minutes. 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

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References