



Published on: June 10, 2010

PRINTER
FRIENDLY

What's new in military medicine: The ancient art of acupuncture is new again

BY: CAPTAIN TREVOR AMBRON, MPAS, PA-C, USAF , JAAPA
 06/17/2010

Acupuncture is the term used to describe a family of procedures involving stimulation of anatomic locations on the skin by a variety of techniques. The most-studied mechanism of stimulation employs penetration of the skin by thin, solid, metallic needles, which are manipulated manually or by electrical stimulation. Traditional acupuncture can be traced back to ancient China and is now one of the most commonly used forms of health care worldwide. Western medicine has only embraced the practice over the past few decades. More recently, military medicine has begun to investigate the beneficial effects of medical acupuncture.

The term battlefield acupuncture (BA) was first coined by Air Force Colonel Richard C. Niemtow, MD, PhD, MPH, who is one of the US military's leading medical acupuncture researchers, president of the American Academy of Medical Acupuncture (AAMA), and full-time acupuncture physician at Malcolm Grow Medical Center, Andrews Air Force Base, Maryland. Utilizing five specific auriculotherapy (ear) acupoints, Dr Niemtow's BA method can deliver significant attenuation of pain in just a few minutes. ?

The BA technique can be repeated several times and involves using special semipermanent needles that can remain in the ears for 3 or 4 days before falling out on their own. Even when a servicemember is in full combat gear, the ears are easily accessible and therefore an ideal site for acupuncture. Traditionally, auriculotherapy utilizes known anatomic areas of the ear corresponding to body morphology.³ Based on these anatomic landmarks, BA uses five specific locations in each ear, which are needled sequentially and quickly, one ear at a time, in the following order: Cingulate Gyrus, Thalamus, Omega 2, Point Zero, and Shen Men. Oftentimes, significant pain reduction can be achieved before utilizing all 10 acupoints. Depending on the presenting pathology, these pain-free effects can last minutes, hours, days, weeks, or even months.³ Potential side effects are extremely rare and include superficial pain, bleeding, bruising, or infection at the needle site.?

How acupuncture works is still not completely understood; as described in its Chinese origins, the body contains pathways called meridians, in which energy, or qi (pronounced "chee"), flows. When the flow through these meridians is disrupted, pain or disease

develops. Insertion of fine needles at specific acupoints is thought to restore the flow of qi, which in turn leads to healing.^{1,2} Modern scientific evidence suggests that the activation of opioid sites is at least partially responsible for the analgesic effect.⁴ The BA method is thought to alter the processing of pain in the hypothalamus, thalamus, cingulate gyrus, and cerebral cortex structures.³ ?

ADVANTAGES OF BA?

BA can be a useful adjunct for patients in whom narcotic use would be troublesome. Imagine being a military medic on a combat patrol that is ambushed and suffers casualties. Although several of your wounded troops have painful injuries, their trigger fingers still work and you need them to continue fighting. Instead of morphine, you grab your acupuncture needles and quickly stimulate the appropriate auricular acupoints. Pain relief is an essential component of combat casualty care; however, the use of narcotics risks taking the servicemember completely out of the fight. Beyond pain control, the potential advantages of BA to the injured warrior include staying in the fight with no alteration in sensorium and no nausea or vomiting. In addition, the use of narcotics would force the transport of patients on litters. More combat team members would be required to carry a patient than are required to provide ambulatory assistance for a patient still lucid enough to walk. ?

Dr Neimtzow and his team have also successfully incorporated acupuncture into the pain management arsenal available to injured servicemembers returning home from Iraq and Afghanistan. The variety and complexity of blast-related injuries have produced challenging pain issues, both in the acute and rehabilitation phases of care. ?

APPLYING BA TO PRIMARY CARE ?

The most practical application of BA may be on the "battlefield" of the daily clinic. Many military acupuncture providers have achieved good outcomes for acute and chronic conditions, such as headaches and musculoskeletal ailments, sometimes by using just a single auricular acupoint. ?

At home in the United States, the pain treated in emergency departments (EDs) may relate best to pain seen in a combat zone. Use of BA in the ED may be a viable option for pain relief and could potentially reduce the use of narcotics and their associated side effects. Acupuncture may allow patients to remain awake and alert and to leave the ED pain-free, without having to wait for narcotic side effects to wear off, thus freeing up valuable bed space in already crowded EDs. Those of us who work in family medicine also see a wide range of pain-related issues in which medical acupuncture could be a tremendous benefit. ?

While complete resolution of discomfort is the goal, the reality is often significant pain reduction, hopefully enough for troops to complete the

mission or return to duty or for civilians to go about their daily routine. Patients must be educated that acupuncture is not a replacement, but rather a supplement, complementing traditional Western treatments. In the noncombat environment, acupuncture is an additional therapy to consider after going through a standard history, physical examination, and diagnostic testing. ?

TRAINING TO BE AN ACUPUNCTURIST?

Certification by the American Board of Medical Acupuncture (ABMA) is currently open only to physicians and requires 300 hours of formal training in all types of acupuncture. The ABMA's parent organization, the AAMA, requires its physician members to have a minimum of 220 hours of formal training and 2 years of clinical experience. The practice of acupuncture by nonphysicians is regulated in at least 33 states; several other states have statutes pending.⁶ As always, PAs should inquire about the specific training and oversight requirements for licensure and credentialing in their own state before implementing any therapy. In the military, the training of physicians in medical acupuncture and the goal of training and credentialing PAs in only the BA method represents the first potential large-scale incorporation of medical acupuncture use across the military health care system.

?Trevor Ambron is stationed at Moody Air Force Base, Georgia, and has served in both Iraq and Afghanistan. The author has indicated no relationships to disclose relating to the content of this article.

Acknowledgment: The author would like to express his sincere gratitude to Colonel (sel) Heather R. Pickett, DO, FAAFP, United States Air Force, for her assistance with this article.?

The views expressed in this article are those of the author and do not reflect the official policy or position of the United States Air Force, Department of Defense, or the United States Government.?

<http://www.jaapa.com/whats-new-in-military-medicine-the-ancient-art-of-acupuncture-is-new-again/article/171503/>