The Treatment of Chronic Pain in Survivors of Torture and Refugee Trauma: an Integrative Approach

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Boston Medical Center: Refugee and Immigrant Health Program
Complementary and Alternative Medicine Clinic
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Learning Objectives

1. Establish the connection between torture and chronic pain

2. Analyze and Evaluate Complementary and Alternative (CAM) techniques that may be effective in reducing chronic pain in survivors of torture and refugee trauma.

3. Demonstrate how CAM techniques can be used in conjunction with conventional western medicine to reduce chronic pain in torture survivors.

4. Create a strategy which incorporates CAM techniques in the treatment of torture survivors. Presentation of the Boston Medical Center (BMC) Refugee CAM clinic as a successful model.

5. Identify resources for learning CAM techniques.
Outline

Introduction: Torture
Definition, prevalence, epidemiology, sequelae, clinical presentation

Chronic Pain
Definition, common western approaches

Complementary and Alternative Medicine (CAM)
Definition, introduction to major modalities as practiced at Boston Medical Center (BMC) Refugee CAM Clinic

Experience of the BMC Refugee CAM Clinic, an integrative model
Case study, results and challenges

Suggested Further Research

Additional Resources

Questions & Answers
Torture

Aim to break the personality, silence the voice, terrorize others in the community into compliance

Affects, families, surroundings, society at large (physically, psychologically, spiritually and socially),
Body to Mind to Spirit
Spirit to Mind to Body

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Prevalence of Torture

• Prevalence of torture among refugees: 5-35%

• In one study, 11% of all foreign born patients presenting to an urban primary care center were tortured. One third had not disclosed the torture history prior to this survey. Crosby, Grodin et.al. 2005.

• Prevalence even higher among refugees at the BMC CAM clinic (correlation between torture and chronic pain)
Mechanism of Injury

- Blunt Trauma
- Penetrating injuries
- Suspension
- Burning
- Electric shocks
- Exposure to substances
- Asphyxiation
- Sexual torture
- Traumatic removal of appendages/tissues
- Other (stretching, prolonged restraint, deprivation)
Psychological Trauma

• Threats and false accusations
• Mock executions
• Witnessing others being tortured
• Solitary confinement
• Prolonged restraint and deprivation

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Psychological Symptoms

- Anxiety disorders: palpitations, headaches, tension,
- dizziness, panic attacks, tremors
- Adjustment disorder
- Somatization
- Depression: anhedonia, hopelessness, suicidal ideation, loneliness, and insomnia or somnolence
- Post-traumatic stress disorder: re-experiencing, avoidance, increased arousal
- Complex PTSD

Presentation at BMC Refugee CAM Clinic

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<tr>
<td>PTSD</td>
<td>85%</td>
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<tr>
<td>Depression</td>
<td>92%</td>
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Culturally Bound Syndromes

- Most screening instruments not culturally validated
- Culturally specific diagnosis: PTSD/srog-r lung in Tibetan monks.

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Chronic pain

Chronic pain encompasses a complex array of sensory discriminatory, motivational-affective, and cognitive evaluative components. Dalacorte RR, Rigo JC, Dalacorte A. 2011

Chronic pain is among the most common reasons for seeking medical attention and is reported by 20 to 50 percent of patients seen in primary care. Zahid H Bajwa, MD, Howard S Smith, MD Section Editor, Mark D Aronson, MD Deputy Editor, H Nancy Sokol, MD

Chronic pain, and somatization are pervasive among survivors of torture and refugee trauma.
Western Approaches

Western treatment options for chronic pain generally fall into six major categories:

• pharmacologic
• physical medicine
• behavioral medicine
• neuromodulation
• interventional
• surgical

Zahid H Bajwa, MD, Howard S Smith, MD Section Editor, Mark D Aronson, MD Deputy Editor, H Nancy Sokol, MD 2011

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Pharmacologic Approaches

Pharmacologic approaches are the most widely used therapeutic options to ameliorate persistent pain.

- Non-opioid analgesic agents (eg aspirin, acetaminophen, nonsteroidal anti-inflammatory drugs (NSAIDs)s, COX-2 Inhibitors)
- Tramadol
- Opioids
- Alpha 2 adrenergic agonists
- Antidepressants (tricyclics and serotonin-norepinephrine reuptake inhibitors [SNRIs])
- Antiepileptic drugs (gabapentin, pregabalin, and other anticonvulsants)
- Muscle relaxants
- N-methyl-d-aspartate (NMDA) antagonists
- Topical analgesic agents
- Combination treatments (limited research available)

Zahid H Bajwa, MD, Howard S Smith, MD Section Editor, Mark D Aronson, MD Deputy Editor, H Nancy Sokol, MD 2011

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Chronic Pain

In the general population currently available treatment modalities on average result in only about a 30 percent decrease in pain.  Zahid H Bajwa, MD, Howard S Smith, MD Section Editor, Mark D Aronson, MD Deputy Editor, H Nancy Sokol, MD 2011

Among survivors of torture and refugee trauma, conventional Western treatments may be even less effective as a result of the complexity of pain, and cultural barriers to efficacy.
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Recent Interest in Complementary and Alternative Medicine (CAM)

Research by NIH: National Center for Complementary and Alternative Medicine (NCCAM). NCCAM estimated basic research budget 2012: $47.6 million
Complementary and Alternative Medicine

- Herbs
- Supplements
- Hypnosis
- Meditation
- Art Therapy
- Biofeedback
- Yoga
- Tai Chi
- Qi Gong
- Massage, Acupuncture
- Whole Medical Systems

Traditional African Medicines, Traditional Chinese Medicines, Ayurveda, and Native American Healing

NCCAM
Traditional Folk Remedies

- Black Seed
- Cups – used almost universally
- Bleeding Techniques
- Scarification
- Massage

Analogous to CAM
CAM Modalities Practiced by BMC CAM Refugee Clinic

1. An introduction to the major modalities practiced at the BMC CAM clinic

2. An evaluation of possible benefits and risks

Modalities:

- Acupuncture
- Acupressure
- Tuina
- Gwa sha
- Cupping
- Electro-acupuncture
- Qi gong/T’ai chi
- Meditation
- Yoga
- Massage

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Traditional Chinese Medicine

• Includes acupuncture, cupping, electro-acupuncture, tuina, gwa sha
• Believed to enhances autonomic nervous system
• Mind-body treatment (spirit to mind to body)
• Promotes inner peace
• Almost no known complications
Acupuncture

• The insertion of fine needles into points along meridians (energetic lines along the body)
• Emphasize whole body health
• Moving qi and unblocking stagnation (areas of stasis)
• Example: GB21, ST36, SP6, LV3, LI4, Yintang


Acupressure
- Stimulation of the meridian system at specific points will rebalance qi thereby stimulating body’s natural healing processes
- Stimulation of points results in muscle relaxation, increased blood flow and flow of qi

Gwa Sha
- Involves repeated pressured strokes with a smooth edge (spoons are commonly used)
- The smooth edge is moved down the muscles or along the pathway of the acupuncture meridians

Cupping
- Cup is applied with suction to draw superficial muscle layer into the cup

Patients at the BMC CAM Refugee clinic frequently request one or more TCM modalities.
Both are Chinese energy-channeling practices that incorporate mental concentration, physical balance, muscle relaxation, and relaxed breathing.

Incorporate a cognitive aspect not present in most exercise, which may explain why some controlled studies have found greater benefits from t’ai chi or qigong than activities of comparable intensity. Benedict, Mancini, Grodin 2009.

Meditation

- Calms the mind
- Stress and pain reduction
- Cardiovascular and respiratory benefits
- Concerns: may promote flashbacks

Three published case studies of refugees and meditation:


2. Cambodian monks were surveyed regarding potential alternative treatments for anger in the Cambodian population; meditation was hypothesized to be an effective form of traditional treatment. Nickerson and Hinton

Body Work & Massage

- May address dissociation from body that results from torture
- Multiple studies have shown that massage is an effective treatment for chronic pain, depression and PTSD
- Concern: touch and exposure may make patients feel vulnerable
- Program at Harborview Hospital in Seattle, Washington: massage is being used to treat Somali refugee women. Chakofsky-Lewy 2011
Yoga

- Mind-body connection: heal dissociation with the body.
- Provides light exercise in a community setting: increases flexibility, lubricates joints and tendons
- Gentle, chair yoga most appropriate for refugee population
- Concern: Some poses may mimic torture postures. Certain postures may be too physically demanding.
- “Yoga can help individuals deal with the emotional aspects of chronic pain, reduce anxiety and depression effectively and improve the quality of life perceived.” Vallath et al

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What is an “integrative model”?

“Integrative medicine reaffirms the importance of relationship between practitioner and patient, focuses on the whole person, is informed by evidence, and makes use of all appropriate therapeutic approaches to achieve optimal health and healing.”

(Consortium of Academic Health Centers in Integrative Medicine)
We’ve exhausted all conventional measures. One last desperate option is to put you on an alternative medicine that has a 96 percent success rate.
Finding a Path Together

Complementary and Alternative Medicine Clinic for Refugees
Boston Medical Center: Refugee and Immigrant Health Program
Boston, MA USA

http://www.bu.edu/bostonia/web/grodin/

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Initial Questions in Creating an Integrative Model

Who would come to the clinic?

Who would refer?

Would refugees and torture survivors accept acupuncture?

If so, why?

Would CAM modalities be effective in the treatment of chronic pain?

How could this be accurately assessed?
Findings from the clinic

Patients treated from 39 different countries including Afghanistan, Bhutan, Cameroon, China, Ethiopia, Guinea, Liberia, Sierra Leone, Somalia, Sudan, Tibet, Uganda (Predominant female Somali population)

Main source of referrals was from the Primary Care Physicians who work in the Refugee Center. Other referral of family and friends by patients

Referrals from other hospitals

Most common complaints include musculo-skeletal pain, anxiety, and chronic headaches

All patients continued usual-care with their primary physicians. Most had undergone extensive testing including multiple imaging studies (MRI, radiographs, computed tomography, nuclear bone scans) and blood tests.

Pain assessed using Wong Baker faces pain scale and a standard 1-10 pain scale using a body map.
58% of our patients reported that they or family member(s) had been victims of physical or mental torture. 13 individuals reported being beaten, raped or imprisoned. 10 had their family member(s) tortured or killed. 9 reported torture inflicted upon themselves as well as their family member(s). This number is higher than other estimates of the prevalence of torture (correlation between torture and chronic pain).

20% of our patients confirmed that they did not suffer any form of torture.

Details were not available from 22% of our study population.
During initial intakes patients were asked about their prior experience with or knowledge of Traditional Chinese Medicine/acupuncture: most denied any previous knowledge.

Basic explanations of the techniques were given to each patient, and the opportunity to opt out of treatment was offered.

To date, no patient has refused treatment.

Patients were accepting of all the modalities: cups, electro-acupuncture, needles, and massage, as well as breathing techniques, and qigong.
In a preliminary study, 50 individuals were analyzed who were seen from November 2009 - April 2011. 425 total treatments were performed.

In this sample, 8 were male, 42 were female - Average age was 52

14 individuals had entered on tourist visas and requested asylum status upon arrival, the rest had entered as refugees or asylum seekers. One was a derivative asylee.

Patients were from 13 different countries: Afghanistan, Bhutan, Cameroon, China, Ethiopia, Guinea, Liberia, Sierra Leone, Somalia, Sudan, Tibet, Uganda, Iran
Perceived Benefits

- An overall pain score was determined for each patient by averaging reported pain scores on the body map pain scale.
- Change scores were measured by subtracting the initial pain scores from the post test scores, and averaged.
- The average change in pain scores was a 1.92 decrease.
Case Study I

A Somali female in her mid forties originally seen by a primary care provider at BMC in 2005, had been in the US since 2001, and was a refugee with a history of torture, including sexual assault.

On her initial visit she reported severe pain in her head, arms, shoulders and legs. She was diagnosed with PTSD, depression, somatization, and mild osteoarthritis of the knees. Her overall pain level was stated to be 10/10.

On her 6th visit for acupuncture her overall pain level was 7/10 and since then pain ranged between 6/10 to 10/10.

When asked why she returned so frequently for treatment she said: “before acupuncture, I cry, cry, my pain aaaahhh! now, acupuncture, pain: down, down”.

Case Study II

A female torture survivor from Uganda in her mid forties, who has been in the US for approximately 1 year, was referred by her primary care provider for acupuncture.

She had been tortured and beaten severely around her head, face and chest. She also experienced sexual assault. She reported continuous pain on the right trunk just below her breast and over her ribs, which has persisted since the beatings. She is also being treated for PTSD and depression.

By visit 3 she reported pain at 4/10, at visit 4 it was 1/10. After five visits, she reported that her pain was “not a problem.” At a follow up visit with her primary care provider, she reported that her pain was completely resolved.
As demonstrated by case studies, the results are clinically significant, particularly because most patients had exhausted other treatment options before arriving at the clinic and had found limited relief.

Research challenges:

- Small sample size
- Language and culture barriers
- Pain assessments not culturally validated
- Standardized data collection
- Incentives for overestimating pain (patients over-reported pain in order to continue treatment at the clinic)
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→ Suggested Further Research & Additional Resources

Questions & Answers
Further Research

- Culturally sensitive assessments for pain
- Integration of other modalities in various combinations
  - Exercise Class
  - Cooking class
  - Massage
  - Group models
- Effect of CAM on utilization of other hospital services: decreased cost of care
- Reduced use of pharmaceuticals
Additional resources are available at HealTorture.org.

Also great thanks to Puja Lama & Chi Sun 
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Questions & Answers

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“Nothing happens next. This is it.”

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