

Cancer Treatment Centers of America®

Introduction to Acupuncture:

Using Acupuncture for Symptom Relief

Presented to: Living Beyond Breast Cancer Annual Conference
For Women Living with Metastatic Breast Cancer

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Overview of Presentation

- Introduction
- Philosophy & How Acupuncture Works
- Benefits of Acupuncture
- Uses of Acupuncture & Acupuncture's Role in Breast Cancer Care
- Safety, Precautions and Risks
- Treatment: Practical Information
- Finding Qualified Licensed Acupuncturists
- Conclusion
- Questions and Answers

INTRODUCTION

Introduction: Acupuncture

- Acupuncture originated in China over 2,000 years ago.
- One of the oldest and most commonly used medical practices in the world.
- Essential part of Traditional Chinese Medicine.
- Takes a more “energetic” approach to pathology, diagnosis, and treatment.

Philosophy: Understanding Acupuncture and How it Works



Chinese Medical Theory and Western Medical/Scientific Understanding

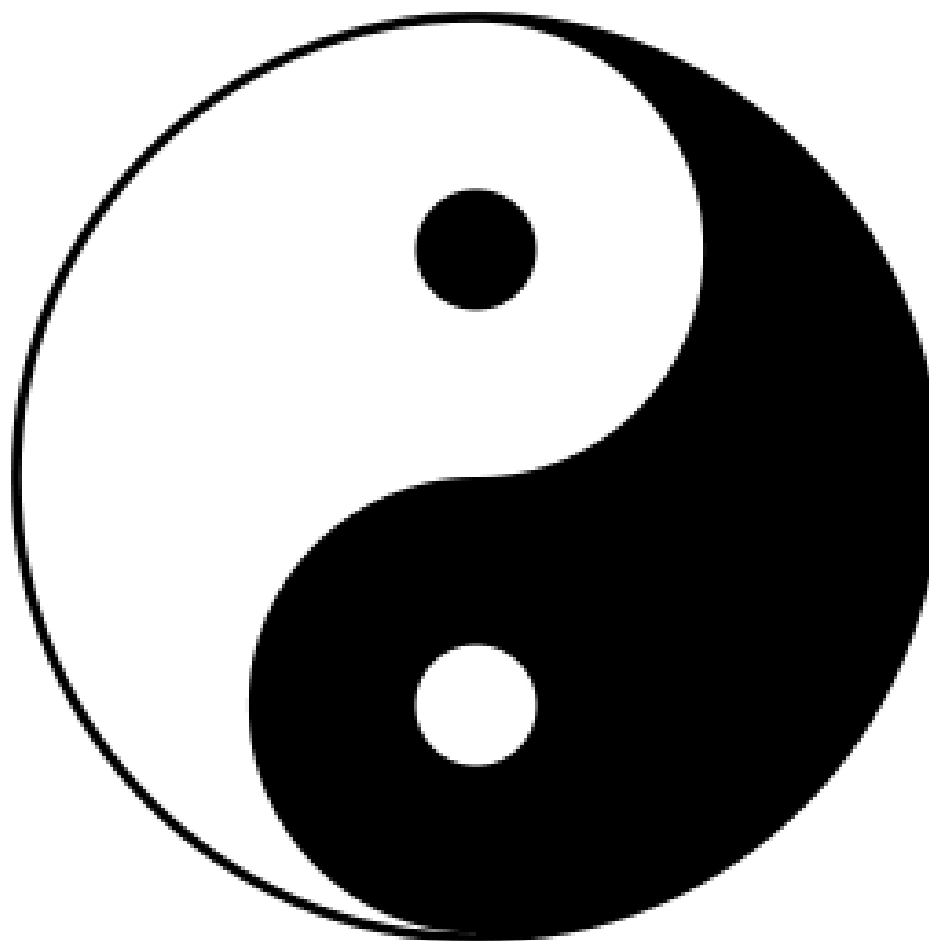
Philosophy: Chinese Medical Theory



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- Definition: Acupuncture is an ancient medical practice, which involves the gentle insertion of needles to stimulate specific therapeutic points on the body. This is thought to encourage the flow of energy within the body, therefore restoring harmony and balance to the body.
- Basic art of acupuncture: **BALANCE!**
- Balance is the center pillar from which all understanding, diagnosis, and treatment is made.

Yin Yang



Yin Yang



YIN	YANG
Contraction	Expansion
Passive/Rest	Activity
Cold	Hot
Internal	External
Quiet	Restless
Female	Male
Darkness	Light

Yin Yang



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- Ideal wellness equals balance.
- Pathologies and diseases are considered imbalances.
- Understood that all conditions are evolving and changing.
- Example: Menopause, common symptoms include hot flashes, night sweats, heat in the palms of hands and soles of feet, insomnia, restlessness.

Qi

氣



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- Pronounced “chee”
- Simplified and typically defined as Vital Energy and Life Force.
- Believed to regulate a person’s spiritual, emotional, mental and physical balance.
- Influenced by opposing forces of yin and yang.

Qi

- Components/types of Qi:
 - Congenital Qi equals the energy the individual is born with, plus genetic predisposition.
 - Acquired Qi: including Food (Gu Qi) and Air (Kong Qi).
 - Thus, we are born with certain genetic dispositions, while the food we eat and air we breathe will help to determine our state of health.
- Born with excess amounts of qi; as we age, this level of qi decreases naturally.

Meridians



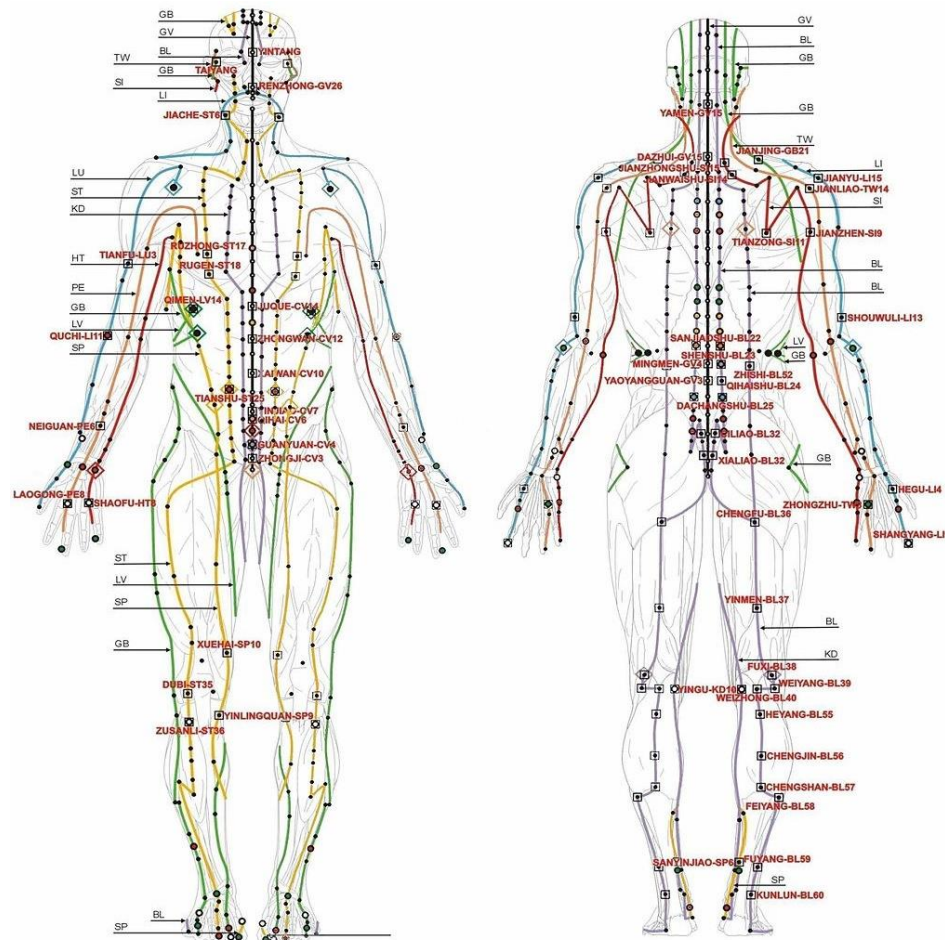
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- Almost 400 acupuncture points, which line up into what we call meridians or channels.
- Qi travels through the body in these meridians or channels.
- Meridians conduct energy between the surface of the body and internal organs.
- Meridians run in regular patterns through the body and over its surface.
- Like rivers flowing through the body to irrigate and nourish the body.

Meridians



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Meridians



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- In an ideal, healthy state, qi is flowing smoothly and freely within the body.
- When there is an internal imbalance of qi and yin/yang in the body, this will lead to an obstruction to the flow of qi in the meridians.
- Then pain, disease, and dysfunction will result.

Meridians



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- An acupuncturist seeks to restore balance to the flow of qi by gently stimulating these specific therapeutic points on the body assisting in removing any “dams” or stagnation.
- The encouragement of the smooth flow of qi is thought to result in the relief of symptoms and the promotion of health.

Western Medical Perspective & Theories on Mechanisms of Action



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- There are no existing entities in Western medicine which directly relate to qi, meridians, or acupuncture points.
- Examines physiological changes.
- Stimulates and releases natural neurochemicals in the body, endorphins and enkephalins. These are natural painkillers and anti-inflammatories.
- Studies have shown increases in serum and cerebrospinal fluid levels of endorphins and enkephalins after acupuncture.

Western Medical Perspective & Theories on Mechanisms of Action



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- Immune enhancing: transient increases in white blood cells, antibodies, immunoglobulins, natural killer cell activity.
- Decreases histamine response, thus decreasing the anti-inflammatory response.
- Encourages release of other neurotransmitters and neurohormones, such as serotonin.
- Balances the central and peripheral nervous systems by regulating blood pressure, affecting blood circulation and body temperature.

Western Medical Perspective & Theories on Mechanisms of Action



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- Enables electromagnetic signals to be relayed at a greater rate, so it may affect motor nerve firing.
- Electrical impedance of the skin is lower at acupuncture points, these correlate with where cutaneous nerve beds exist. (involved in analgesic affect of acupuncture)
- Gate theory of pain transmission in the spinal cord: with competing sensory information from acupuncture, will prevent/block pain fibers from transmitting pain signals.

Benefits of Using Acupuncture

Why consider using acupuncture?

Benefits



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- Minimal concern of negative side effects or risks.
- Incidence of adverse reactions is very rare.
- Minimal concern of interference with other medications or treatments.
- Often symptom relieving pharmaceuticals can also produce side effects.
- Some patients may not want to take more medications (and again concern of interactions).

Benefits



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- Some patients may have intractable issues that are not responding to conventional methods.
- Multiple issues can be addressed with each treatment.
- Can be performed in any setting, as long as the patient is comfortable. (No special equipment is needed; very transportable.)
- Side effects are often beneficial...increase in energy, digestive support, decrease stress, better mood, improved sleep.

Uses of Acupuncture

What can acupuncture be used to treat?

Indications for Acupuncture

- Acupuncture is often associated with musculoskeletal injuries and pain control, but it actually has very broad applications, including:
 - gynecological disorders
 - respiratory disorders
 - gastrointestinal problems
 - neurological disorders
 - dermatological problems
 - mood/emotional issues

Acupuncture in Oncology



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- Can be integrated and utilized alongside conventional treatments, such as chemotherapy and radiation (without negative interactions).
- Research on the use of acupuncture as a complement to conventional cancer treatment.
- Not used to cure or treat cancer.
- Used to reduce side effects of chemotherapy, radiation, surgery and medications.
- Improves and supports quality of life.

Acupuncture in Breast Cancer Care



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- Pain management
- Surgery preparation and recovery
- Affect peripheral neuropathies
- Improve digestive function: decrease nausea/vomiting, promote appetite, decrease constipation/diarrhea
- Encourage circulation
- Decrease hot flashes and menopausal symptoms

Acupuncture in Breast Cancer Care



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- Support immune function
- Increase range of motion and decrease discomfort, tightness, and heaviness associated with lymphedema
- Decrease fatigue
- Decrease insomnia
- Decrease xerostomia (dry mouth)
- Assist in addiction recovery, including smoking cessation

Acupuncture in Breast Cancer Care



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- Decrease dyspnea (shortness of breath)
- Alleviate stress and promote relaxation
- Reduce feelings of anxiety and depression
- Restore an overall sense of well-being and promote a sense of balance

Research-Breast Cancer

Versus Venlafaxine for the Management of Vasomotor Symptoms in Patients With Hormone Receptor-

Positive Breast Cancer: A Randomized Controlled Trial. *Journal of Clinical Oncology*, 28(4), 634-640.



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- Hot flashes: Adverse effect of anti-estrogen hormone treatment in breast cancer care.
 - Randomized controlled trial to test whether acupuncture reduces vasomotor symptoms and produces fewer adverse side effects in patients with Hormone Receptor Positive Breast cancer compared to Effexor (venlafaxine).
 - 50 patients were randomly assigned to either receive 12 weeks of acupuncture or Effexor.
 - Both groups had significant decreases in hot flashes and depressive symptoms, improvement in mental health.

Research-Breast Cancer : Walker, E., et al. (2010). Acupuncture

Versus Venlafaxine for the Management of Vasomotor Symptoms in Patients With Hormone Receptor-

Positive Breast Cancer: A Randomized Controlled Trial. *Journal of Clinical Oncology*, 28(4), 634-640.



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- Changes were similar indicating that acupuncture was as effective as Effexor.
- However, after 2 weeks post-treatment, the Effexor group experienced significant increases in hot flashes, while in the acupuncture group hot flashes were still managed at low levels.
- Additionally, Effexor group experienced 18 incidences of adverse effects (nausea, dry mouth, dizziness, anxiety), while the acupuncture group experienced 0.
- Acupuncture group also reported improvement in energy, libido, clarity of thought and sense of well being.

Research-Breast Cancer

Crew, K., et al. (2007). Pilot Study of

Acupuncture For the Treatment of Joint Symptoms Related to Adjuvant Aromatase Inhibitor Therapy in Postmenopausal

Breast Cancer Patients. *Cancer Surviv.* 1(4):283-291.



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- Pain-Joint symptoms related to adjuvant aromatase inhibitor therapy in post-menopausal breast cancer patients
 - Pilot study, 19 women with early stage breast cancer with musculoskeletal complaints related to AI therapy.
 - Received acupuncture twice weekly for 6 weeks.
 - Improvement in pain scores, pain severity, pain-related functional interference.
 - Improvement in physical well-being.
 - No adverse effects.

Research-Breast Cancer

Molassiotis, A. Bardy, J., Finnegan-John, J.,

Mackereth, P., Ryder, D., Filshie, J., Ream, E., Richardson, A. (2012). Acupuncture for Cancer-Related Fatigue in



Patients with Breast Cancer: A Pragmatic Randomized Controlled Trial. *Journal of Clinical Oncology*, 30(36), 4470-4476

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- Acupuncture for Cancer-Related Fatigue in Patients with Breast Cancer.
 - Randomized controlled trial with 2 groups, 227 patients receiving acupuncture and 75 patients receiving “usual” care (booklet on managing fatigue).
 - Acupuncture group received acupuncture treatment for 20 minutes once per week for 6 weeks.
 - Outcome measures using a Multidimensional Fatigue Inventory, reporting significant improvements in overall fatigue, physical and mental fatigue, activity, motivation, psychological distress, and quality of life.

Safety

Safety, Risks, Side Effects, Relative Contraindications, Precautions

Safety



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- FDA approved acupuncture needles for use by licensed practitioners in 1996.
- FDA requires sterile, nontoxic needles be used and are labeled for single use.
- Training of acupuncturists in the US
 - In addition to the study of Chinese medicine, students will study Western medicine (anatomy, physiology, pathology).

Risks/Side Effects

- Typically, side effects are positive changes in sleep, appetite and bowel function, energy and emotional state.
- On occasion, original symptoms may worsen for a short period of time, then improve.
- Discomfort, bleeding, or bruising with needle placement/removal.
- Potential RARE risks: infection, fainting, broken needles, spontaneous abortion, organ puncture, pneumothorax, nerve damage.

Relative Contraindications

- Rash, infection, skin affected by radiation
- Open wounds
- Pacemaker (for electro-acupuncture)
- Lymphedema

Precautions

- Pregnancy
- Blood thinners
- Bleeding disorders
- Thrombocytopenia (low platelets)
- Severe delirium, psychosis, belligerence

Treatments



Practical Information!

What Should You Expect?

- Settings-hospital (in and out-patient), community style, private practice, Medical acupuncture
- Initial Consultation-focus on main complaints, in addition to a thorough, comprehensive history
- Objective measures: Tongue and Pulse
- Treatment time varies: 15 to 45 minutes

How should I prepare for treatment?



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- Recommended to avoid heavy meals, alcohol, strenuous and prolonged physical activity both before and after treatment.
- Usually recommended to take it easy following treatment, particularly after the first acupuncture treatment.

What are the needles like?

- Sterile and disposable.
- Metallic, extremely thin and flexible.
- Comparable to a strand of hair!
- Solid, so they are different from the hypodermic needles used for vaccinations or drawing blood.
- Nothing is being injected into the body.
- Most patients feel NO discomfort or minimal discomfort, such as a slight pinch or pressure.
- Placed at different angles, superficially.

What are the needles like?

- Photo of needle



What are the needles like?

- Once needles are placed, you will not feel discomfort.
- Needle placement is very quick, usually under 5 minutes.
- On average, about 10 to 15 needles.
- Retained in the skin for 15 to 45 minutes.

What does the treatment feel like?



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- Generally, patients feel extremely relaxed during the treatment...majority fall asleep!
- May experience “qi sensation” during treatment: limbs may feel heavy, may feel pressure, ache, tingling, itching at acupuncture points, may feel internal movement/circulation.
- After treatment, patient may experience a decrease in presenting symptoms and will feel relaxed.

How many treatments will I need?



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- Frequency of visits depends on the issue being treated, how acute or chronic it is, the person's constitution.
- Generally, once per week for treatments until lessening of symptoms, then may stagger visits.
- Some people choose to receive acupuncture after conditions improve, for maintenance and general well-being.
- Usually, a series of treatments are recommended, about 5 or 6 treatments.

Finding A Licensed Acupuncturist

- Master Degree (3-4 years of study) at a program accredited by ACAOM (Accreditation Commission for Acupuncture and Oriental Medicine)
- National certification exam (NCCAOM-National Certification Commission for Acupuncture and Oriental Medicine)
- Credentials (State Licensed, NCCAOM Diplomate)
- www.nccaom.org
- www.acupuncturepa.org
- www.licensepa.state.pa.us
- www.cancercenter.com

Conclusion



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- Acupuncture is a safe and effective modality that can be utilized to address numerous issues and side effects of metastatic breast cancer and its treatments.
- Acupuncture is holistic, natural and balancing in essence and can cause profound beneficial effects physically, mentally, and emotionally when included in the care and treatment of patients with breast cancer.

Question and Answer Session!



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