MEDICAL ACUPUNCTURE

BEFORE, DURING & AFTER CANCER TREATMENT

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Training/Experience

- Columbia University Research Coordinator, NY, NY
 - Dr. Memet Oz on Post-op pain control with intra-operative audio recordings.
 - OB anesthesia pain control with intra-thecal opioids and clonidine
- University of Medicine & Dentistry of NJ Medical School School of Osteopathic Medicine, Stratford, NJ
- Northwestern University Residency, Chicago, IL
 Family Medicine & Integrative Medicine
- **UCLA** Acupuncture Training Acupuncture for Physicians
- Cranial Academy Cranial Osteopathy Training
- American Academy of Anti-Aging Medicine Metabolic & Anti-Aging Medicine Fellowship, University Of South Florida



Topics for Today's Lecture

History of Acupuncture

Science of Acupuncture

Acupuncture and the Cancer Patient

Questions & Answers



HISTORY OF ACUPUNCTURE -CHINA

- DEVELOPED OVER 3000 YEARS AGO (approximately 1021 BC)
- 1st known Acupuncture written text:
- Huang Di Nei Jing (Yellow Emperor' Inner Classic)
- 206 BC- 220 AD
- Era of the Han Dynasty
- Acupuncture Went through many refinements
- In the 1800's with the introduction of Western Medicine from Dutch, British and American Missionary and Military doctors popularity started to decline.
- It 1929 it was outlawed in China due to political reasons but practice continued uninterrupted.



HISTORY OF ACUPUNCTURE -CHINA

- In 1949 Mao promoted Chinese Medicine in an effort to bring inexpensive medical care to a largely underserved rural population.
- They created a huge corp of "barefoot doctors" who were community members trained in basic Chinese and Western Medicine.
- By 1960 approximately 80% of all illnesses were treated by "barefoot doctors."

HISTORY OF ACUPUNCTURE -THE WEST

- 1774 French Physicians show interest
- Propagate research throughout Europe
- 1825 "Memoir of Acupuncturation" translated from French to English by Benjamin Franklin's grandson Franklin Bache
- Bache experimented on prisoners at Penn State Prison with good results for pain and other disorders
- 1830's Lancet & British Journal of Medicine Publish papers in Acupuncture



HISTORY OF ACUPUNCTURE -THE WEST

- 1840's Decreased interest in Europe except France. Most European countries set off by the French Revolution underwent revolts and restructuring of classes.
- 1876/1880 The Civil War Field Surgeons Manual
- 1892-1947 The Principles and Practice of Medicine Osler
- 1887-1954 with French occupation of Indochina (Vietnam, Cambodia, Laos, some of Thailand) physicians continued exposure to Acupuncture and Chinese Medicine
- In France text L' Acupuncture Chinoise was published in 1939, 1941, 1955 and there were acupuncture courses for physicians.



What Happened in the United States?





- The American Medical Association was founded by a group of doctors in 1847 who were affiliated with various local and state medical associations.
- The AMA tried to combat the prevalence of what it saw as 'quack' medicines--potions with "secret" ingredients of doubtful use or safety, which were widely available before the invention of modern drugs.



- The standard AMA approved treatments in the 1800's including mercury, leeches, blood letting to name a few.
- The AMA opposed healing approaches such as homeopathy, osteopathy, chiropractic, alternative treatments, nutrition, other nature based medicine through it's policies and other means.



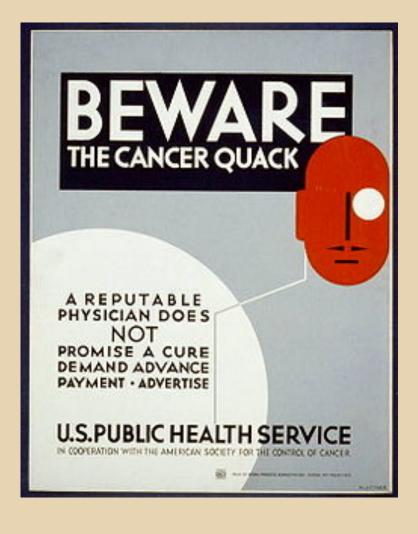
- By 1849 the AMA had established a committee to educate the public about the dangers of quack medicines. There were huge advertising campaigns that to crusaded against quack medicines (including any types of treatments not provided by the AMA).
- Principle 3 of the AMA Principles of medical ethics stated: "A physician should practice a method of healing founded on a scientific basis; and he should not voluntarily professionally associate with anyone who violates this principle."
- The committee on quackery existed until 1974. In 1976, Chester Wilk and four other chiropractors sued the AMA for violations of sections 1 and 2 of the Sherman Antitrust Act (monopolies and trade restraint).



In the 1980's while the Wilk litigation was in progress, it replaced Principle 3, stating that a physician "shall be free to choose whom to serve, with whom to associate, and the environment in which to provide medical services.

On September 25, 1987, Judge Getzendanner issued her opinion that the AMA had violated parts of the Sherman Act, and that it had engaged in an unlawful conspiracy in restraint of trade "to contain and eliminate the chiropractic profession."







THE NEW YORK TIMES

- James Reston Editor and Columnist for NY Times
- In 1971 wrote an article about his experience in China having and emergency appendectomy with only acupuncture.
- Exposed Americans to the idea of Alternatives to Traditional Medicine.
- Public Enthusiasm Outweighed Professional Reluctance!



THE LEGACY

1972 Richard Nixon visits China

Nixon's personal physician observes surgeries using Acupuncture instead of Anesthesia

Acupuncture research in the United States began

1991-1500 physicians and 8000 nonphysicians practicing acupuncture



MEDICAL ACUPUNCTURE

•Acupuncture research continued in Europe and Asia especially in France.

•Dr Joseph Helms, MD studied acupuncture in France and brought these ideas to the US.

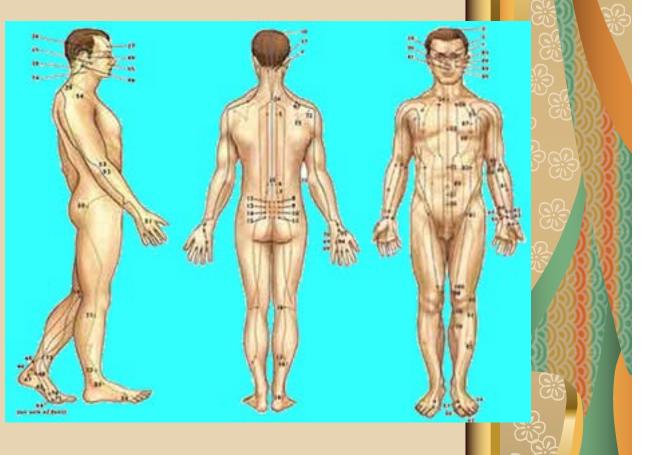
•Medical acupuncture is an adaptation of classical acupuncture from China and France.

•It had integrated knowledge of western medicine, anatomy, physiology, pathology, and the principles of evidence based medicine.



TRADITIONAL CHINESE ACUPUNCTURE

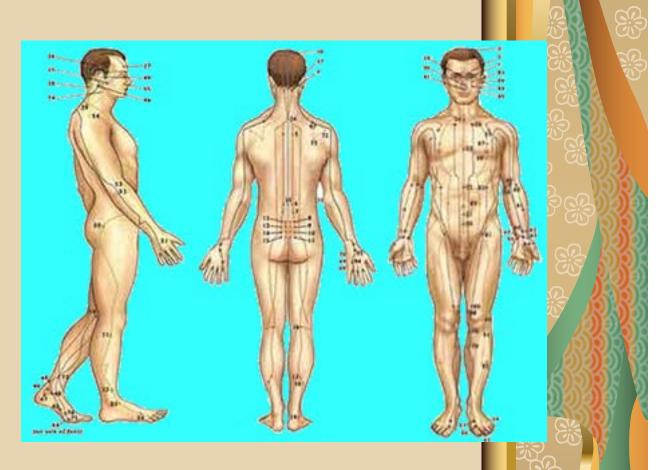
- Two forces that coexist in nature: Yin and Yang. These interact to regulate the flow of vital energy, known as Qi.
- Good health- Yin and Yang are in balance, and the flow of Qi is smooth and regular.



TRADITIONAL CHINESE

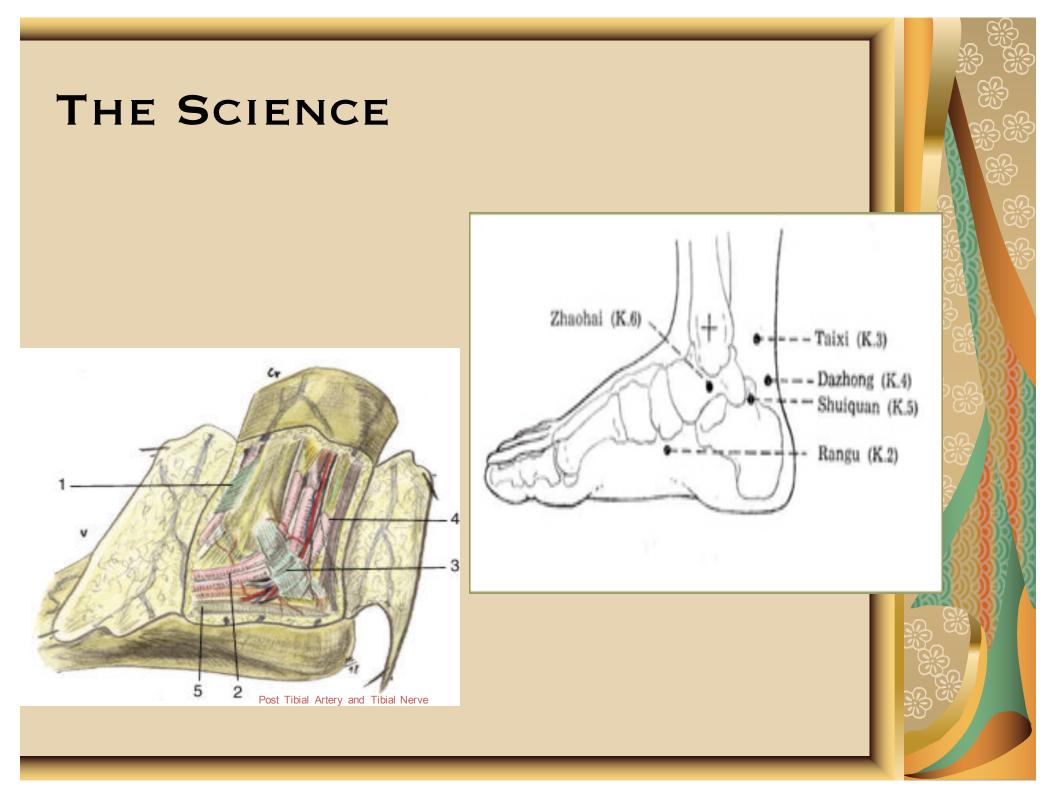
ACUPUNCTURE

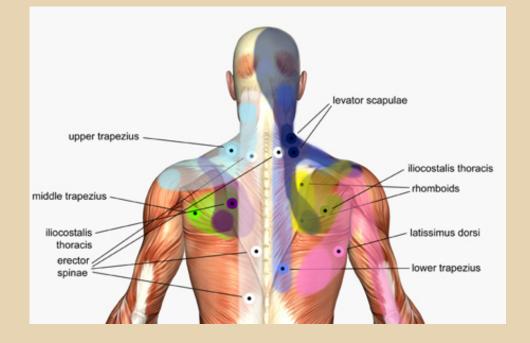
- When Yin and Yang become unbalanced, there are disturbances in Qi, which lead to illness and disease.
- Qi flows through a network of channels called meridians, which bring Qi from the internal organs to the skin surface.
- Along meridians there are acupuncture points that can be stimulated to correct the imbalance & restore the body to health.

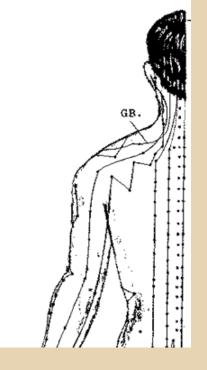


- Dissection of Acupuncture points on cadavers revealed that points are at neuro-vascular bundles.
- These neurovascular bundles correspond to peripherial endings of cranial & spinal nerves at breaks in the fascial planes.
- Many acupuncture points and trigger points overlap.









Trigger Points

Acupuncture Points

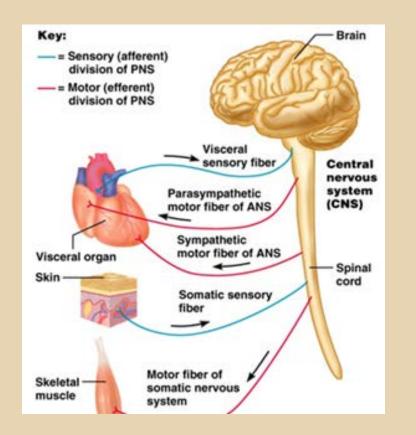


- Acupuncture analgesia is one of the most researched physical modality in medicine today.
- Studies using human and animal studies were started in China in 1965 and by 1980 it was established that there was a link between endogenous opioids and analgesia observed with acupuncture.



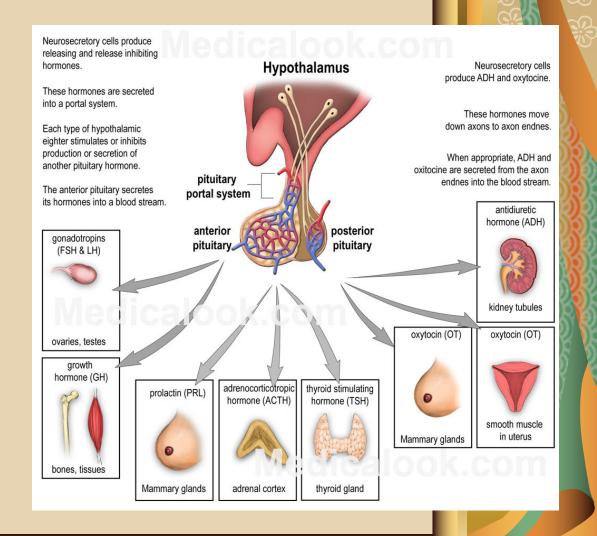
Acupuncture though stimulation of neurovascular bundles appears to induce signals in afferent nerves.

These propagate to the midbrain, triggering a sequence of excitatory and inhibitory mediators in the spinal cord.

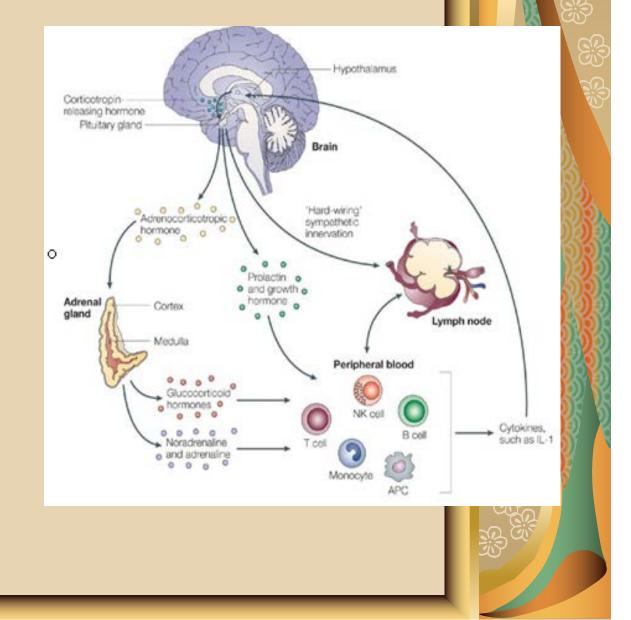




- When these signals reach the hypothalamus and pituitary, they trigger the release of adrenocorticotropic hormones (ACTH) and endorphins and other hormones and neurotransmitters.
- It activates the body's pain modulating system and changes the processing and perception of noxious stimuli at various CNS levels.



- The resultant release of neurotransmitters such as:
 - Serotonin
 - Dopamine
 - Endogenous opioid-like substances endorphin and norepinephrine
 - Anti-Inflammatory Cytokines
- These act throughout the body leading to pre- and postsynaptic inhibition and suppression of pain signals, decreased inflammation and other effects.



Types of Acupuncture

Chinese (Most Common) Japanese Korean Chinese mixed with other styles With Moxa With TENS unit stimulation With Infrared Lights With Cupping



ACUPUNCTURE & THE CANCER PATIENT

The use of acupuncture in oncology, for management of treatment-related adverse effects and for palliative care, is finding greater acceptance in Western medicine.

Both patients and physicians are optimistic about combining traditional and non-traditional treatments.

WESTERN PERSPECTIVE ON CANCER

- Western science views cancer as resulting from genetic-environmental interactions causing multiple genetic alterations that affect coding of oncogenes for growth factors, growth factor receptors, and tumor suppresser genes.
- Dysfunction of the host immune system plays an important role in the development of cancer.
- Development of cancer can thus be viewed as a failure of immune surveillance.



EASTERN PERSPECTIVE ON CANCER

- In Traditional Chinese Medicine (TCM), uncontrolled cell proliferation and dysfunction of the immune system can be attributed to a decline of deficiency of Jing (life essence, DNA).
- Jing, stored in the Kidneys, governs reproduction, growth, and development including cellular differentiation and proliferation.
- Improper control over these processes due to a deficiency of Jing may result in uncontrolled cellular growth, which manifests as cancer.



ADVERSE EFFECTS OF ACUPUNCTURE TREATMENT

Rare...
Can have slight bruising
Minimal discomfort from needles
Only sterile needles are used

Most people find it relaxing like a massage even if they do not like massage.



ADVERSE EFFECTS OF CANCER

& CANCER TREATMENTS

Inflammation of the gastrointestinal mucous membranes

- Nausea and vomiting/Loss of Appetite
- Diarrhea / Constipation
- Change in GI Flora
- Depression with Low Serotonin production

Myelosuppression/Immunosuppression

- Leukocytopenia (Low White Blood cCount)
- Thrombocytopenia (Low Platelets)
- Anemia (Low hemaglobin / Iron)
- Increased Susceptibility to infections

Depression, Anxiety, Fatigue, Insomnia Hair loss Fatigue Pain / Scarring

Neuropathy Hot Flashes

HOW CAN ACUPUNCTURE HELP CANCER PATIENTS?

Pain

- Scaring
- Fatigue & Weakness
- Anxiety & Depression
- Mana Insomnia
- Neuropathy
- Diarrhea, Constipation

Manorexia

- Weight Loss
- Dizziness
- Nausea/Vomiting
- 📓 Dyspnea
- Vasomotor Symptoms
- Improved Immune Function

Chemotherapy Induced Nausea & Vomiting

Acute Nausea & Vomiting –

- during or soon after intravenous administration of chemotherapeutic agents
- from stimulation of the chemoreceptor trigger zone.

Delayed Nausea and Vomiting

- (peak 2-4 days after chemotherapy)
- from the toxicity of antineoplastic agents to the gastrointestinal tract.
- Acupuncture is helpful for both of these with and without other medications such as Zofran.



Diarrhea, Constipation, Low Appetite

We work to balance the GI tract which can reduce these symptoms significantly

Also, work on GI flora and maintenance of good flora and nutrients

PAIN MANAGEMENT

Acupuncture benefits patients with pain due to:

- Pre-existing or non-cancer pain
- Malignant disease pain from enlarging or "angry tumors"
- Bony metastasis causing pain
- Pain from treatments
 - Chemotherapy
 - Radiotherapy
 - Surgery
 - Scar tissue

Treatments: 1-2 times weekly with or without pain medications.



SCARRING

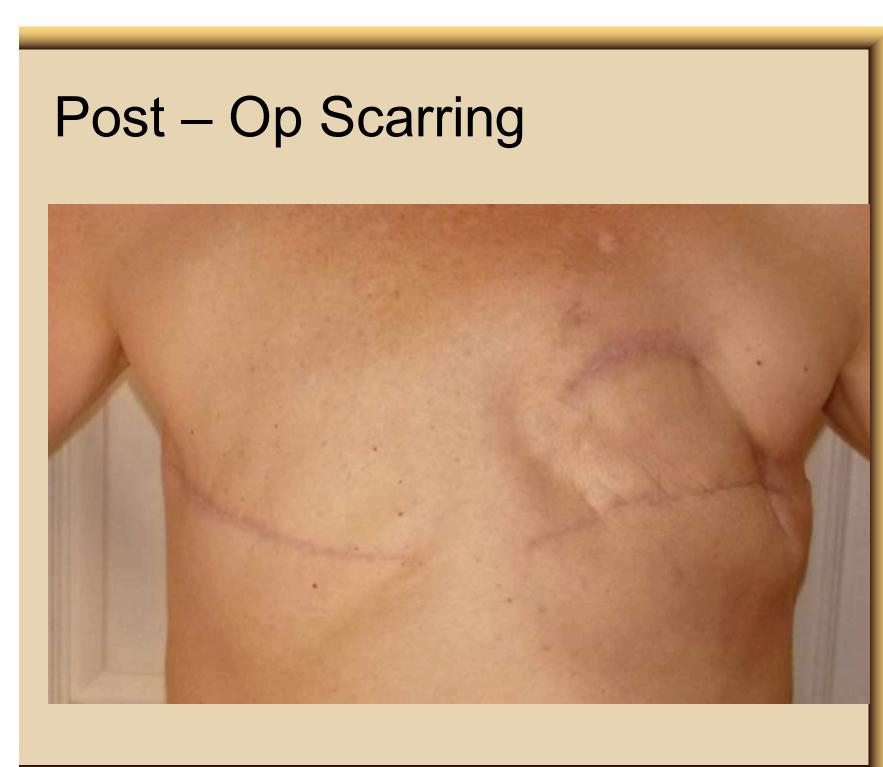
Great for Scarring old and new
 Prevention of Scaring
 Relieving pulling from scar tissue
 Increases Range of Motion
 Decreases pain



Radiation Burns & Fascial Restriction







Postsurgical Brachial Plexopathy

- Treatment of pain and limited upper extremity movement following axillary lymphadenectomy in patients with breast cancer.
- Great to start early post-op
- Works well for relief of chronic pain
- Works acutely for diminished upper extremity strength and range of motion following surgery.
- Great to use with Physical Therapy



NEUROPATHY

 Works great for neuropathy
 Best to start while having Chemotherapy to slow or halt progression of neuropathy.

If starting after chemo can reverse some neuropathy as well.

SHORTNESS OF BREATH

Cancer-related dyspnea is a distressing symptom for many individuals post-op for many surgeries especially near ribs and after chest tube and drain removals as well as at end-of-life.

Improves breathlessness, relaxation, and anxiety

Can be combined with gently manipulation of diaphragm and between ribs with great relief.



Intractable Hiccups

Works better than most medications for Chemotherapy induced Hiccups



Vasomotor Symptoms:

Hot flashes and Sweating (Frequent symptoms of menopause due to low hormones)

Result following certain therapies:

- Surgical removal of one/both testicles or ovaries)
- Medical castration with gonadotropin-releasing hormone analogs (ie Lupron) for prostate cancer
- Anti-estrogen therapy with tamoxifen or therapy with aromatase inhibitors for breast cancer.

Acupuncture can provide minimal to great relief of these symptoms especially if combined with stress relief, adrenal and nutrient support.

Chemotherapy-Radiotherapy Induced Myelosuppression:

-Improvement of leukocytopenia (low WBC count) and thrombocytopenia (low platelets) resulting from chemotherapy

-These patients are usually treated daily for 10 days to 2 weeks.



Anxiety, Depression & Insomnia

Anxiety, Depression and Insomnia can all improve with Acupuncture.

Also helps with Stress Management

HOW CAN ACUPUNCTURE HELP CANCER PATIENTS?

Pain

- Fatigue & Weakness
- Anxiety & Depression
- 📓 Insomnia
- Neuropathy
- Diarrhea, Constipation

Manorexia

- Weight Loss
- Dizziness
- Nausea/Vomiting
- 📓 Dyspnea
- Vasomotor Symptoms



Risks of Acupuncture

 Infection Risk VERY LOW from Sterile needles.
 Pneumothorax – Very Low Risk

Caution in certain bleeding disorders such as hemophilia or in sites of infection.



Myths About Acupuncture

It is Voodoo

There is no research on acupuncture
I have to believe in it for it to work
It is going to hurt a lot
You are going to put the needles only where it hurts



Important Points

Talk to your physicians involved in your care and tell them if you are interested in acupuncture or other therapies.

Try to form a plan together to reach your treatment goals as a team.
 Of course, your goals may change over time and that it okay.



When to Start Acupuncture...

Can Start Before, During Or After Surgery, Chemotherapy and Radiation.

For Chemotherapy its best to start early to prevent side effects.



SYNERGY

Acupuncture works great with other treatments including....

Diet GI and Nutrient Support Exercise Medications Chemotherapy Radiotherapy Surgery Manipulation



FREQUENCY & DURATION OF TREATMENT

Frequency:

- Usually once per week.
- Can vary based on patient needs and response to treatment.
- Can take breaks when needed but may lose momentum

Duration:

- Variable from 1 to multiple.
- Usually 3-4 treatments then re-evaluate.



INSURANCE

COVERAGE/PAYMENT

Medicare & Medicaid
DO NOT COVER Acupuncture

Commercial Insurance

- Many DO COVER Acupuncture
- Some have limited visits per year
- They usually only cover pain, headaches or generalized anxiety disorder.
- Regence, Premera, BlueCross Blue Shield, Lifewise WA

Self Pay & Grants

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