

"INTEGRATIVE ONCOLOGY"
Presentation at UCSD by
Daniel Vicario, M.D. November
10, 2015

Organized by UCSD Center of Excellence for Research and Training in
Integrative Health (CERTIH) and Holistic and Integrative Medicine (HI-
Med) UCSD Medical
Students

INTEGRATIVE ONCOLOGY UCSD
CERTIH and HI-Med
November 10, 2015

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Agenda

1. Integrative Medicine
2. Medical economics
3. Cancer. Evolving medical treatments
4. Integrative Oncology
5. Integrative Program at SDCC and SDCRI
6. Collaborative efforts
7. Discussion, Questions and Answers



Please note:

This was a 50 minute presentation, brief overview, with information and data that deserves significant more time and dedication to each topic. Each slide would require more detailed and expanded information and explanation.

Integrative Medicine

Emerging medical specialty that incorporates

- Art and Science of caring for the whole person - body, mind, spirit - to prevent and treat disease
- Empowering patients to create a condition of optimal health, wellness and Healing
- Incorporating evidenced based (and also proven/works) natural therapies, complementary healing disciplines and modalities in the care of patients and caregivers
- Safety and Efficacy of these therapies



Integrative Medicine

"Bringing together the best that Medicine and Science have to offer, with the riches of nature, wisdom of the human body, the best in natural, complementary, multidisciplinary and multidimensional approaches, the strength of social interactions and the power of the Human Spirit to Heal the whole person in an optimal healing environment ."

Daniel Vicario (1998)



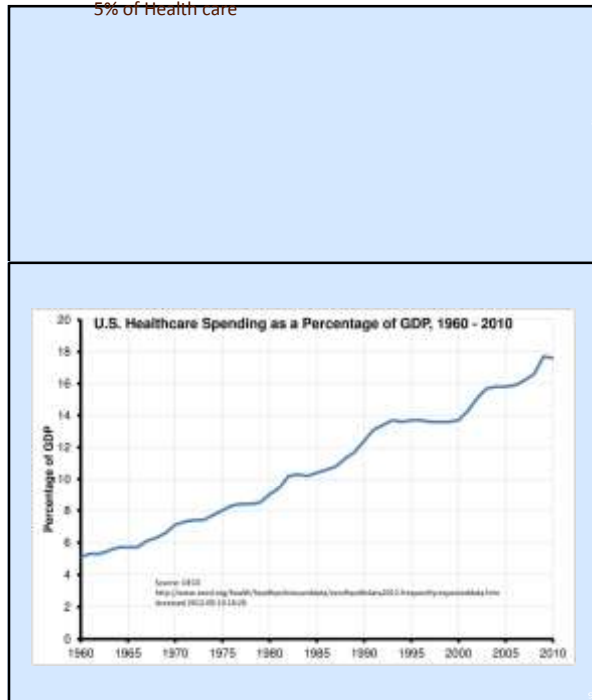
Health Care costs in the U.S.
(approximate numbers 2015)

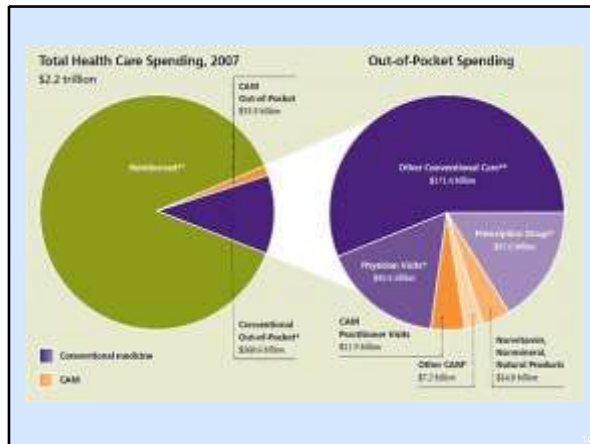


GDP: \$17 trillion

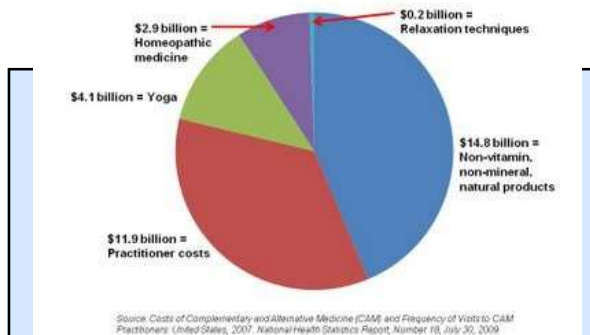
Healthcare: \$2.8 trillion:
17% of GDP

Cancer Care: \$150 billion:
5% of Health care





Complementary and Alternative Medicine Costs, 2007
Americans spent \$33.9 billion out-of-pocket on CAM products and services



Cancer

What is Cancer?

- Immature cells
- Cells that lost purpose.


Why does cancer occur?

- Genetic predisposition
- Oncogenes (cancer genes) overexpressed
- Tumor suppressor genes (down regulated)
- Environmental factors


Mutations




Cancer (cont)



- Metastasis
- Cancer cells can remain dormant for years
- Surgical, Medical & Radiation Oncology
- Genomic Oncology
- Integrative Oncology



Epigenetic factors



Cancer statistics

• All cancers:

- 1.65 million diagnosed a year: 4,500 a day
- 580,000 die every year: 1,600 a day
- 1 of every 4 deaths

• Lifetime probability of developing cancer

- 1 in 3 women; 1 in 2 men

• Prevalence: 14 million currently living with cancer

Surveillance, Epidemiology and End Results (SEER) Program.
National Institute of Health (NIH)
National Cancer Institute (NCI)
2014 Statistics



Advances in Medicine and Science

Improved medicines (chemotherapy)

Monoclonal antibodies

Rituxan, Herceptin, Cetuximab (Erbix), etc.

Targeted molecular therapies

Imatinib (gleevec), Erlotinib, Sunitinib, Crizotinib, Olaparib, many more

Anti-angiogenic agents

Avastin (VEGF receptor inhibitor)

Thalidomide, Revlimid

Immunotherapy. Vaccines



Increase in Cancer

Higher risk factors

- Environmental
- Nutrition factors
- Lifestyle

Genetic and Epigenetic Factors

Imbalance. Stress (fertile ground for dormant cells?)

Early detection

Openness to disclose



Chemotherapy still has significant side effects

GI: N/V, anorexia, diarrhea

Organ damage: liver, kidney, lung, heart

Neuropathy

Hair and skin

Bone Marrow Suppression

Intimacy affected

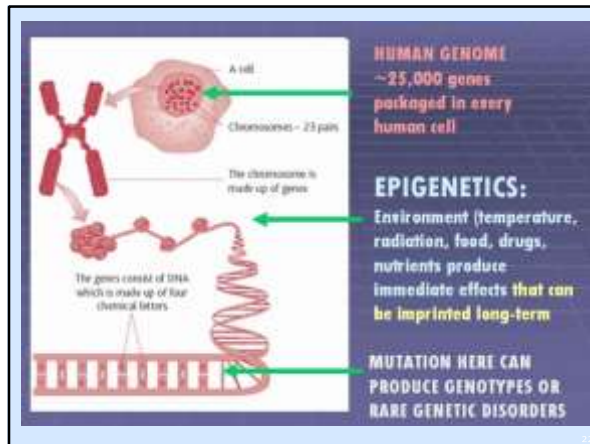




New advances (cont.)



- Symptom management
- Apoptotic compounds
- Stem cells
- **Genomic medicine**
- Metronomic chemotherapy
- Chemosensitivity and resistance Assays
- **Molecular profiling**
- **Epigenetics** (turning genes on and off)



European Journal of Human Genetics

Journal Home | Contents | Archives | Abstracts

Article

Transgenerational response to nutrition, early life circumstances and longevity

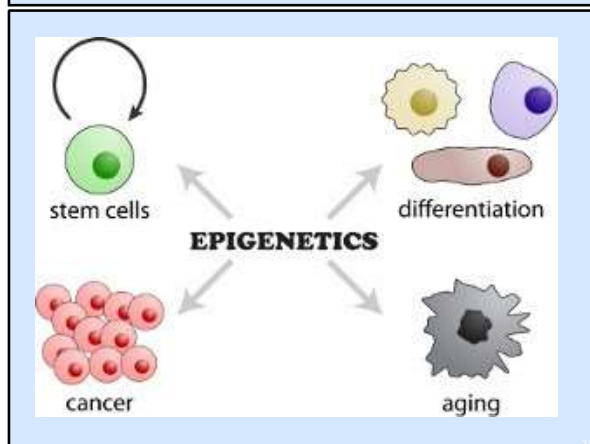
Journal Club | Lora Oliva Riquelme¹, Maria Mendez² and Michael G. Spector³

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³Department of Biotechnology and Biomedical Sciences, Umeå University, Umeå, Sweden

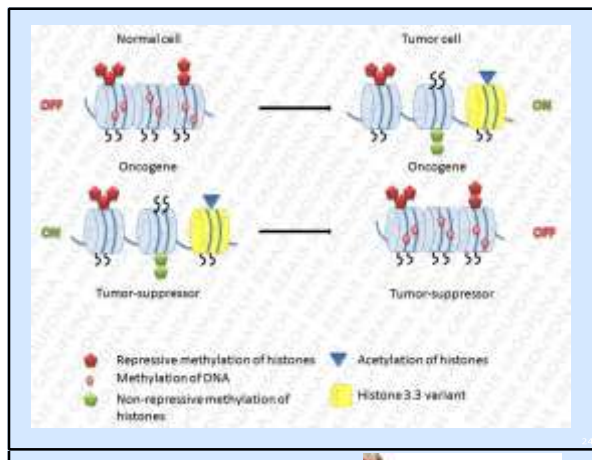
Received 10 January 2015; revised 17 March 2015; accepted 17 March 2015; published online 27 April 2015

Abstract

Nutrition might influence, at some level, epigenetic or other changes that could be transmitted to the next generation impacting on health. The slow growth period (SGP) before the prepubertal peak in growth velocity has emerged as a sensitive period where different food availability is followed by different transgenerational responses (TRR). The aim of this study is to investigate to what extent the previously used childhood circumstances were in fact the determinants of the findings. In the analysis, data from three nuclear families, comprising 315 probands and their 1518 parents and grandparents, left after exclusion because of missing data, were utilized. The availability of food during any given year was classified based on regional registers. The secondary SGP was set at the ages of 6–13 years and the availability of food during these years classified as good, intermediate or poor. The previously identified circumstances were defined by the father's ownership of land, the number of siblings and later in life, the status, the death of parents and the greater level of literacy. An earlier finding of a sex-specific influence from the secondary TRR was also tested. The results of a sex-specific influence from the secondary TRR were during the year, coming from the paternal grandparent to the female grandchild and from the paternal grandchild to the male grandchild, was confirmed. In addition, a response from father to son was seen when childhood social







Placebo

●Number of publications increased ten fold

●Placebo effect increasing



• Nocebo (negative effect)

• Expectation effect



• Meaning and Context: MAC

Definitions

- CAM: Complementary and Alternative Medicine
- Holistic Medicine
- Integrative Medicine
- Integrative Oncology
- Cure
- True Healing



Benefits of Integrative Oncology

- Less symptoms from cancer and its treatments
- Fewer visits to the doctor

Integrative Oncology

- Evolving specialty in Oncology
- Established Society of Integrative Oncology (SIO)
- Patient centered. Focuses on Health, Wellness and supporting the Healing journey of cancer patients
- Very much desired and requested by patients, family members, cancer centers staff and society at large
- Caring for the caregivers (nurses, doctors, all staff)
- Maintaining an optimal healing environment for patients, their loved ones, caretakers, nurses, doctors and all staff

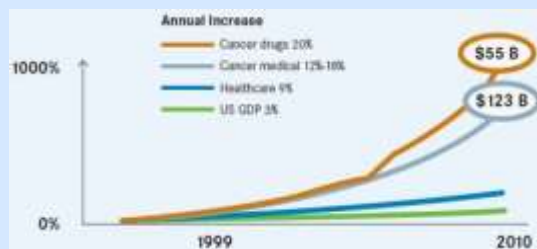
- Decrease in hospitalizations

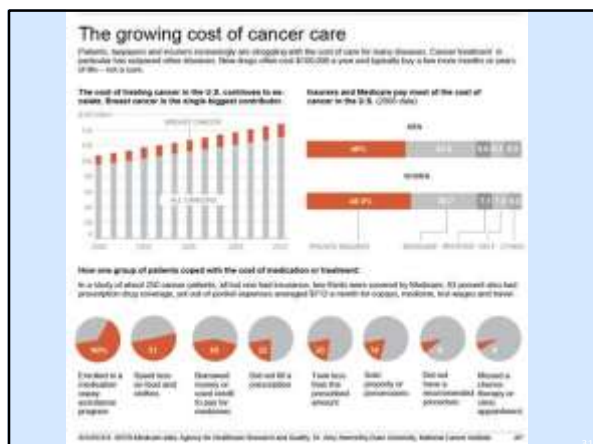
- Reduction of health care costs
- Improving the QOL of cancer patients and their caregivers
- Also supports the medical environment
- Education
- Research



Rise in Cancer Care cost vs US GDP

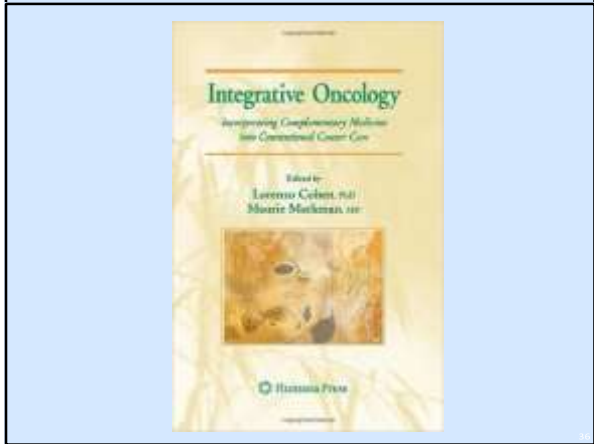
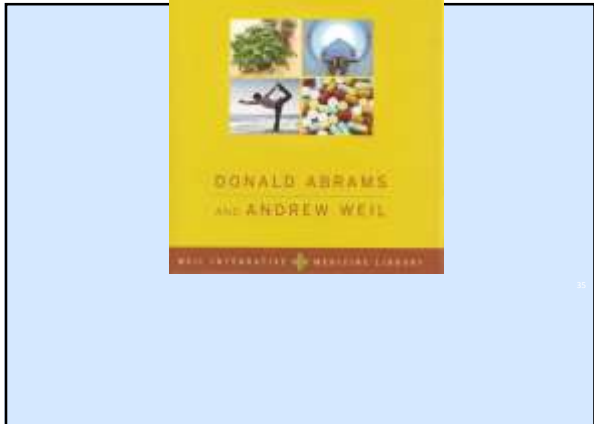
(GDP: gross domestic product)





- ## Evolving Integrative Oncology Programs in U.S.

- San Diego
- UC Irvine
- UCLA
- UCSF
- MD Anderson, Houston
- Dana Farber, Boston
- Memorial Sloan-Kettering, New York
- Several others
- Also emerging: Integrative Oncology Physician Training programs



INTEGRATION = COLLABORATION

Patient centered



Empowerment

- Hope
- Education
- Menu of options
- Team work
- Research

Integrative Healing Traditions

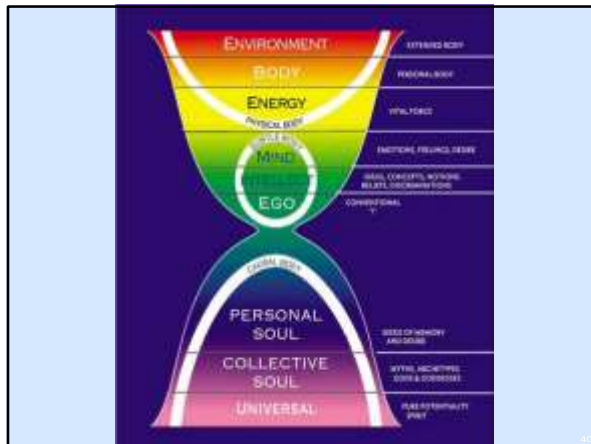
- Hippocrates: Father of Medicine (400 BC)
- Ayurvedic Medicine
- Traditional Chinese Medicine (TCM)
- Native American Medicine
- Other ancient Healing Traditions
- Osteopathic Medicine
- Naturopathic Medicine



Cancer Prevention (and Treatment)

- ☛ Good rest and sleep
- ☛ Nutrition (Tree of Life)





☛Exercise. Movement ☛Stress management

☛Life style improvement

☛Detoxification

☛Feeling in control. Empowerment

☛Balance. Inner Peace

☛Homeostasis. Self Regulation



“Let food be thy medicine;
thy medicine shall be thy food”

Hippocrates, 460-370 BC



Botanicals and dietary supplements

- TNTC (too numerous to count)
- Some may counteract with medicines

Nutrition during cancer treatment



Findings: Much scientific data

Advice: Whole foods, plant based

Advice: Organic. Freshly prepared

Advice: Creating a peaceful and relaxed environment

Advice: No extremes. It's all about balance

Advice: Accept occasional cravings (avoid feelings of guilt)

Advice: Nutrition programs: Individualized, Customized

Bottom line: This topic of nutrition deserves at least a full day presentation

- Several herbs have powerful antioxidant anti-inflammatory antineoplastic properties

- Herbal Medicine is a specialty





Complementary Modalities

☯ Life style changes

☯ Gentle and aerobic exercise

Botanicals and dietary supplements (cont)


 Turmeric, Curcumin


 Treatment of mouth sores (mucositis)

 Lysine

 Glutamine


 Alpha Lipoic Acid


 Prevention and treatment of Neuropathy

 300 mg bid (twice a day)


 Vitamin D


 Melatonin

 Homeopathy: Traumeel, Arnica, etc


 Many, many others. This is a brief summary



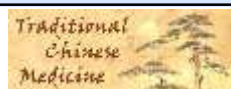
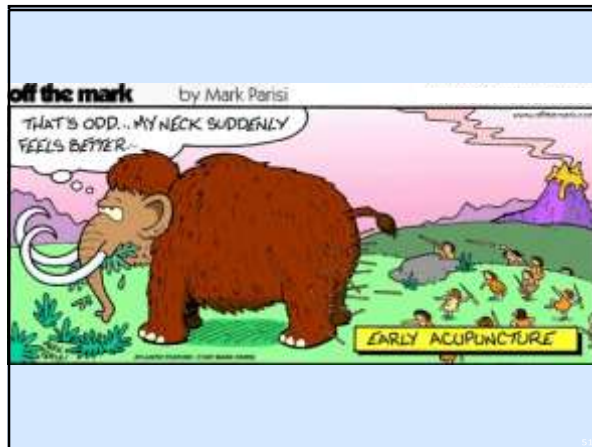
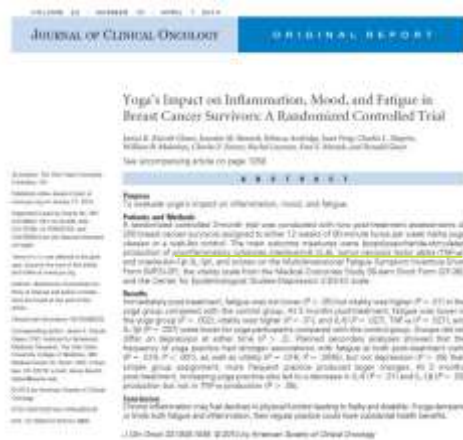
 Yoga (Whole discipline)

 Acupuncture, TCM

 Massage

 Aromatherapy: Healing Aromas





TCM and Acupuncture

- Whole systems approach: Body-mind-energy
- Acupuncture points. Meridians
- Chi (Qi: vital energy)

Acupuncture (cont.)



- Extensive Scientific Literature
- AT SDCC/SDCRI for over 15 years
- Volunteers
- Kim Taylor, LAC joined us in 2005
- PCOM Senior students at SDCRI since 2007
- UCSD CIMH
- Pilot Program at UCSD Moores Cancer Center 2012

- Regulate body functions
- Improve symptoms caused by cancer
- Mitigate side effects, attenuate toxicity
- Enhance therapeutic effect of medical treatments

- Recovery. Restore health, immunity and well being

Acupuncture/Acupressure

- Pain management
- Xerostomia after Head and Neck Radiation Rx
- Nausea, vomiting
- Anorexia
- Vasomotor symptoms (hot flashes)
- Neuropathy
- Fatigue
- Weight loss
- Stress, fear, anxiety, depression
- Promotes sense of well-being and improves QOL



Acupuncture-Point Stimulation for Chemotherapy-Induced Nausea and Vomiting

Esther Eise, Andrew Vickers, Mary Ann Richardson, Claire Allen, Suzanne L. Joffe, Bruce Auld, Tony Lee, Michael Clark, Gordon Edwards, Joseph A. Sparo, Joanne Shaw, Jane Shinton, Edward Sawcyn, Paul Tisdall, and Chuan Zhang

ABSTRACT

Purpose: To evaluate the effectiveness of acupuncture-point stimulation on acute and delayed chemotherapy-induced nausea and vomiting in cancer patients.

Methods and Results: Functional trials of acupuncture-point stimulation by needles, electrical stimulation, magnets, or acupuncture-point removal. Data were provided by investigators of the original trials and entered using a fixed-effects model.

Results: Eleven trials ($N = 1,247$) were pooled. Overall, acupuncture-point stimulation reduced the proportion of acute vomiting (relative risk [RR] = 0.82; 95% CI, 0.68 to 0.99; $P = .04$) but not the mean number of acute emetic episodes or acute or delayed nausea severity compared with controls. By visually, stimulation with needles reduced the proportion of acute vomiting (RR = 0.76; 95% CI, 0.62 to 0.94; $P = .01$), but not acute nausea severity. Electroacupuncture reduced the proportion of acute vomiting (RR = 0.78; 95% CI, 0.68 to 0.91; $P = .00$), but manual acupuncture did not. Delayed symptoms were not reported. Acupuncture reduced mean acute nausea severity (standardized mean difference = -0.19; 95% CI, -0.38 to -0.01; $P = .02$) and mean acute nausea, but not acute vomiting or delayed symptoms. Intravenous electroacupuncture showed no benefit for any outcome. No pooled treatment effect was observed for electroacupuncture, and no pooled electroacupuncture, need status of the acupoint.

Conclusion: This review represents state-of-the-art evidence on acupuncture for chemotherapy-induced nausea and vomiting, suggesting a benefit of electroacupuncture. Electroacupuncture has demonstrated benefits for chemotherapy-induced acute vomiting, but no data with status of the acupoint or need status for delayed symptoms are needed to determine clinical relevance. Acupuncture seems to reduce chemotherapy-induced acute nausea severity, though studies did not involve a placebo control. Intravenous electroacupuncture seems unlikely to have a clinically relevant impact when patients are given standard-of-care pharmacologic antiemetic therapy.

J Clin Oncol 32:1188-1198. © 2014 by American Society of Clinical Oncology

Randomized, Blinded, Sham-Controlled Trial of Acupuncture for the Management of Aromatase Inhibitor–Associated Joint Symptoms in Women With Early-Stage Breast Cancer

Stéphane D. Crow, John L. Lippman, Heather Chen, Luc Brisson, Deborah Harris, Pamela Reid, Wei Tian, and Chuan L. Zhang

ABSTRACT

Purpose: Women with breast cancer (BC) treated with aromatase inhibitors (AI) may experience joint symptoms that are due to aromatase inhibition. We evaluated whether acupuncture (AI) reduced AI-related arthralgia in women with early-stage BC.

Methods: We conducted a randomized, controlled, blinded study comparing true acupuncture (TA) versus sham acupuncture (SA) twice weekly for 8 weeks in postmenopausal women with BC who had self-reported moderate-to-severe joint pain. We included full-body acupuncture and point-specific point stimulation, whereas SA involved superficial needle insertion at nonacupoint locations. Outcome measures included the Brief Pain Inventory Short Form (BPI-SF), Western Ontario and MacMaster Universities Osteoarthritis Index (WOMAC), and Modified Zung for the Assessment of Chronic Rheumatoid Affects of the Hands (MACRAH) obtained at baseline and at 4 and 8 weeks.

Results: Of 81 women enrolled, 42 women were randomly assigned and 39 were evaluable. Baseline characteristics were comparable between the two groups. Our primary end point was the BPI-SF total pain score at 8 weeks, which had a mean for TA compared with SA (3.0 v 4.5; $P = .001$). We also found differences between TA and SA in pain severity (3.0 v 4.5; $P = .001$) and pain-related interference (2.5 v 3.5; $P = .002$) at 8 weeks. Similar findings were seen for the WOMAC and MACRAH scores. The acupuncture intervention was well-tolerated.

Conclusion: Women with AI-related arthralgia treated with TA had significant improvement of pain and stiffness, which was not seen with SA. Acupuncture is an effective and well-tolerated strategy for managing the common treatment-related side effect.

J Clin Oncol 32:1198-1203. © 2014 by American Society of Clinical Oncology

Acupuncture Versus Venlafaxine for the Management of Vasomotor Symptoms in Patients With Hormone Receptor–Positive Breast Cancer: A Randomized Controlled Trial

Steven M. Miller, Allen I. Hudis, Amy Kohn, David H. Bell, Joe Pignatelli, Robert E. Porter, Robert D. Gelber, Susan J. Yang, and Robert A. J. Gray

See accompanying article on page 941.

ABSTRACT

Purpose: Vasomotor symptoms are common adverse effects of endocrine hormone treatment in postmenopausal breast cancer care. The hormone replacement therapy is contraindicated in patients with breast cancer. Venlafaxine (VEN), the therapy of choice for these symptoms, has numerous adverse effects. We tested whether acupuncture may be effective in reducing vasomotor symptoms in postmenopausal women. This unblinded controlled trial tested whether acupuncture reduces vasomotor symptoms and produces fewer adverse effects than venlafaxine.

Patients and Methods: Fifty patients were randomly assigned to receive 12 weeks of acupuncture ($n = 25$) or venlafaxine ($n = 25$) treatment. Health outcomes were measured for up to 1 year post-treatment.

Results: Both groups exhibited significant decreases in hot flashes, depressive symptoms, and other quality-of-life symptoms, including significant improvements in marital health from one to two treatment. These changes were similar in both groups, indicating that acupuncture may be effective as venlafaxine. By 2 weeks post-treatment, the venlafaxine group experienced significant increases in hot flashes, whereas hot flashes in the acupuncture group decreased at two weeks. The venlafaxine group experienced 16 incidences of adverse effects (eg, nausea, dry mouth, dizziness, drowsiness), whereas the acupuncture group experienced no reported adverse effects. Acupuncture had the additional benefit of increased use (due to some women, and/or reported an improvement in their energy, clarity of thought, and sense of well-being).

Conclusion: Acupuncture appears to be equivalent to drug therapy in these patients. It is a safe, effective and feasible treatment for vasomotor symptoms necessary to long-term endocrine hormone use in patients with breast cancer.

J Clin Oncol 32:3444-3452. © 2014 by American Society of Clinical Oncology

Acupuncture for Postchemotherapy Fatigue: A Phase II Study

Andrew T. Foley, David J. Strass, Arthur Fenn, and Sandy R. Gasketh

ABSTRACT

Purpose: To determine whether improvement in postchemotherapy fatigue following acupuncture treatment is substantial enough to warrant a controlled trial.

Patients and Methods: We assessed patients at Memorial Sloan-Kettering Cancer Center who had completed cyclophosphamide chemotherapy for asymptomatic postchemotherapy fatigue. Patients with severe anemia, clinical depression, or clinically performance-limiting fatigue were excluded. Nineteen patients were enrolled in two cohorts: 51 patients in cohort 1 and 51 patients in cohort 2. Patients received acupuncture either twice per week for 4 weeks (25 patients) or once per week for 8 weeks (12 patients). The primary end point was change in score on the Brief Fatigue Inventory between baseline and 2 weeks after the final treatment. A baseline Brief Fatigue Inventory score of four or greater was an eligibility requirement for the trial.

Results: Patients had completed cyclophosphamide therapy an average of more than 2 years previously. Baseline fatigue scores were high, with approximately half of the sample scoring in the "severe" range. Mean improvement following acupuncture was 31.1% (95% CI, 20.6% to 41.5%), meeting our prespecified criterion for declaring acupuncture worthy of further study. Increasing age was associated with poorer response and failure to complete the study. There was no important difference in improvement following once-weekly and twice-weekly treatments.

Conclusion: Acupuncture is worthy of further study in the treatment of postchemotherapy fatigue.

J Clin Oncol 22:1721-1725. © 2004 by American Society of Clinical Oncology

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Table

Analgesic Effect of Auricular Acupuncture for Cancer Pain: A Randomized, Blinded, Controlled Trial

By David King, Gadi Eilat, Evelyn Palmer-Sims, John Fennell, John A. Hainsworth, and Catherine H. T. King

Purpose: During the last 10 years, auricular acupuncture has been used as complementary treatment of cancer pain when analgesic drugs do not suffice. The purpose of this study is to evaluate the efficacy of auricular acupuncture in decreasing pain intensity in cancer patients.

Patients and Methods: Twenty patients were randomly divided in three groups: one group received two courses of auricular acupuncture at points where an electrostimulated signal had been detected, and two placebo groups received auricular acupuncture at points with no electrostimulated signal (placebo points) and one with auricular needle fixed at placebo points. Patients had to be in pain, exhibiting a visual analog score (VAS) of 30 mm or more after having received analgesic treatment indicated to both intensity and type of pain, for at least 1 month of therapy. Treatment efficacy was based on the absolute decrease in pain intensity measured 2 months after randomization using the VAS.

Results: The main outcome was pain measured at 2 months, with the treatment at 2 months reduced pain by 3 months for the eight patients who interrupted treatment after 1 month. For these patients, no data were available because they withdrew from the study during the first month. Pain intensity decreased by 38% at 2 months from baseline in the group receiving acupuncture; there was 18% change for patients receiving placebo (3%). The difference between groups was statistically significant ($P < .0001$).

Conclusion: The observed reduction in pain intensity measured on the VAS represents a clear benefit from auricular acupuncture for these cancer patients who are in pain, despite stable analgesic treatment.

J Clin Oncol 21:4120-4126. © 2003 by American Society of Clinical Oncology

CANCER PAIN is a difficult problem for clinicians because standard drugs do not always provide complete relief.¹ After various cancer treatments, pain often exceeds the clinical response affecting the patient's physical and psychological state. Cancer pain is cancer patients' most common complaint, and it is a major barrier to treatment by the therapeutic agent used when combined with analgesic pain.² Thus, despite pain is the most difficult type of pain to treat in cancer patients, and in general, there are no specific ways to deal with

There are no randomized trials published in the English literature testing the efficacy of auricular acupuncture in relieving cancer pain. For the last 20 years, auricular acupuncture^{3,4} has been used as complementary treatment of cancer pain when subjects' drugs do not suffice. It is mainly used in one technique and no have divided, systematically, to evaluate its efficacy.

In a recent observational study of 50 cancer patients, we showed a reduction of cancer pain following auricular acupuncture.

Massage therapy in cancer



- ⇒ Efficacy
- ⇒ Is it safe in cancer? YES (in the right hands)
- ⇒ Indications: multiple reasons!
- ⇒ Specific awareness in cancer
 - Risk of infections
 - Risk of DVT (clots)
 - Risk of fractures (bone metastasis)
 - Skin sensitivity (from radiation and/or chemo)
- ⇒ Lymphedema
- ⇒ Special Training: Teri Polley, R.N.



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Message for Cancer Pain: A Study with University and Hospice Collaboration

Gloria S. Gorman, PhD, RN, Clinical Assistant Professor, University of Illinois at Chicago, Chicago, IL; Professor, Stephen J. Shapiro, PhD, RN, CN, Doctoral Candidate, University of Illinois at Chicago, Chicago, IL; Associate Professor, Susan M. S. Shapiro, PhD, RN, CN, Doctoral Candidate, University of Illinois at Chicago, Chicago, IL; Coordinator, Susan L. Shapiro, PhD, RN, CN, Doctoral Candidate, University of Illinois at Chicago, Chicago, IL; Assistant Professor, Susan L. Shapiro, PhD, RN, CN, Doctoral Candidate, University of Illinois at Chicago, Chicago, IL; Assistant Professor, Susan L. Shapiro, PhD, RN, CN, Doctoral Candidate, University of Illinois at Chicago, Chicago, IL

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Abstract

Conducting scientific research within a clinical practice area presents a variety of challenges. When the specialty area is hospice and palliative care, the collaborative task is particularly daunting. In this paper, we describe an ongoing study being conducted as a partnership between the University of Illinois at Chicago and a large metropolitan hospice organization. Our research is focused on engaging patients and their caregivers in a study assessing the effects of massage on cancer pain. The purpose of this paper is to describe both the issues involved and the benefits accrued from collaboration between hospice practitioners and academic researchers. We present these process findings as guidelines for others considering out-of-hospital or palliative care research. Upon completion of the study in 2016, we will disseminate outcome findings in future papers.

Keywords: Cancer pain, hospice, massage

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Message therapy for cancer patients: a reciprocal relationship between body and mind

Teri Polley, PhD, RN, CN, Doctoral Candidate, University of Illinois at Chicago, Chicago, IL; Professor, Stephen J. Shapiro, PhD, RN, CN, Doctoral Candidate, University of Illinois at Chicago, Chicago, IL; Associate Professor, Susan M. S. Shapiro, PhD, RN, CN, Doctoral Candidate, University of Illinois at Chicago, Chicago, IL; Coordinator, Susan L. Shapiro, PhD, RN, CN, Doctoral Candidate, University of Illinois at Chicago, Chicago, IL; Assistant Professor, Susan L. Shapiro, PhD, RN, CN, Doctoral Candidate, University of Illinois at Chicago, Chicago, IL; Assistant Professor, Susan L. Shapiro, PhD, RN, CN, Doctoral Candidate, University of Illinois at Chicago, Chicago, IL

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Abstract

Lower cancer patients use therapeutic massage to reduce symptoms, improve coping, and enhance quality of life. Although a meta-analysis concludes that massage can result in short-term benefits in terms of psychological well-being and reduction of some symptoms, additional validated randomized controlled studies are necessary to determine specific indications for various types of therapeutic massage. In addition, mechanistic studies need to be conducted to determine the relative contributions of the therapist and of the recipient's relationship between body and mind in the subject. Various mechanistic research techniques can be used to capture dynamic in vivo responses to biomechanical signals induced by massage of noninvasive force. The relationship of mechanical communication systems (called "mechanisms") to activity in the subcortical central nervous system can be evaluated. Understanding this relationship has important implications for symptom control in cancer patients, because it opens up new research avenues that link self-reported pain with the subjective quality of suffering. The reciprocal body-mind relationship is an important target for complementary therapies that can reduce suffering.

Keywords: Massage, cancer, clinical trials, mechanistic studies, functional magnetic resonance imaging, magnetic resonance spectroscopy, meditation, brain

Patients

Caregivers. Caretakers

Children

Social Services

Psychologists and Counselors

Bereavement

Survivorship

APOS: American Psychosocial Oncology Society

SDCRI Psychosocial Oncology Director: Paul Brenner, M.D., Ph.D.





Empowerment Techniques (MBM)

Visualization

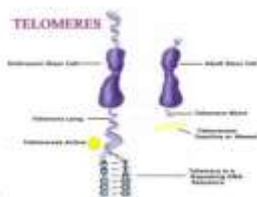
- Contemplation
- Guided Imagery
- Biofeedback
- Mindfulness (MBSR)
- Meditation (PSM, TM, etc)



- Meditation may slow genetic ageing and enhance genetic repair

"...we propose that some forms of meditation may have salutary effects on telomere length by reducing cognitive stress and stress arousal and increasing positive states of mind and hormonal factors that may promote telomere maintenance."

Epel E, Daubenmier J, Mittleman B, Folkman S, Stachowiak E. Can meditation slow rate of cellular aging? Cognitive stress, mindfulness, and telomeres. *Ann N Y Acad Sci*. 2008; Nov;1173:34-53.



Psychiatry and Psychotherapy 2011; 38: 389-391. doi: 10.1111/j.1365-3113.2011.00510.x

Intensive meditation training, immune cell telomerase activity, and psychological mediators.

James T.¹, Eric E.S. Lin J.², Boudreau, D.T., Wilkowitz, C.M., Birkhead, D.A., Sennarath, A.P., Schiele, D.T., Schiele, B.K., MacLean, K.A., King, B.D., Shaver, P.R., Rosenberg, C.L., Tarr, C. ³ Vicksburg, CA, USA, 92382

Author information

Abstract

BACKGROUND: Telomerase activity is a predictor of long-term cellular viability, which decreases with chronic psychological distress (Spal et al., 2004). Research traditions claim that meditation decreases psychological distress and promotes well-being (e.g., De Lame and Cullen, 2009). Therefore, we investigated the effects of a 3-month meditation retreat on telomerase activity and its major contributors in the experience of stress: Perceived Control (associated with decreased distress) and Neuroticism (associated with increased subjective distress). We used meditation retreats to test whether changes in Perceived Control and Neuroticism explained meditation retreat effects on telomerase activity. In addition, we investigated whether key qualities developed by meditative practice, increased Mindfulness and Purpose in Life, accounted for retreat-related changes in the two stress-related variables and in telomerase activity.

MEASUREMENTS AND MAIN RESULTS: Referred participants ($n=32$) meditated for ~6 h daily for 3 months and were compared with a wait-list control group ($n=32$) matched for age, sex, body mass index, and prior meditation experience. Referred participants received instruction in concentrative meditation techniques and complementary practices used to cultivate benevolent states of mind (Walton, 2009). Psychological measures were assessed pre- and post-treatment. Peripheral blood mononuclear cell samples were collected post-treatment for monocyte activity. Increases were found for a priori hypotheses. t -tested significance criteria were used throughout.

RESULTS: Tolonemase activity was significantly greater in retreat participants than in controls at the end of the retreat ($p<0.05$). Increases in Perceived Control, decreases in Neuroticism, and increases in both Mindfulness and Purpose in Life were greater in the retreat group ($p<0.05$). Mediation analyses indicated that the effect of the retreat on tolomemase was mediated by increased Perceived Control and decreased Neuroticism. In turn, changes in Perceived Control and Neuroticism were both partially mediated by increased Mindfulness and Purpose in Life. Additionally, increases in Purpose in Life directly mediated the tolomemase group difference, whereas increases in Mindfulness did not.

Biofield therapies (Energy Medicine)

- Healing Touch
- Therapeutic Touch
- Hands on Healing
- Reiki
- Qi gong
- Tai Chi
- Energy Healing: several different names, techniques and practices



Original Article

Complementary Medicine for Fatigue and Cortisol Variability in Breast Cancer Survivors

A Randomized Controlled Trial

Barnes, J., PhD^{1,2}; Barnes, M., PhD^{1,2}; Jant, S., PhD^{1,2}; Barnes, M., PhD^{1,2}; Barnes, M., PhD^{1,2}; Barnes, M., PhD^{1,2}; Barnes, M., PhD^{1,2}; Barnes, M., PhD^{1,2}; Barnes, M., PhD^{1,2}; Barnes, M., PhD^{1,2}

BACKGROUND: Fatigue is a chief complaint in cancer patients, and uniquely effective treatment. Biofield therapies are complementary medicine practices used by cancer populations. There is some information about their efficacy. **OBJECTIVE:** To evaluate, in a randomized controlled trial, the effects of a 12-week (group) 1-hour session of Reiki, hands-on healing, and a control group on fatigue in 76 breast cancer survivors (ages 40-64). Secondary outcomes were cortisol variability (the measure of cortisol levels, frequency, and quality of the cortisol rhythm) and cortisol levels. **DESIGN:** Randomized controlled trial. **SETTING:** Cancer survivors' support group. **MEASUREMENTS AND MAIN RESULTS:** There were no significant differences between Reiki and hands-on healing at baseline. The Reiki group showed higher fatigue scores compared with controls. Reiki and hands-on healing significantly decreased total fatigue ($P < .001$, Cohen's $d = 1.04$), as did Reiki ($P < .001$, Cohen's $d = 0.88$), with no significant differences between Reiki and hands-on healing. Cortisol levels significantly decreased for Reiki and hands-on healing and controls ($P < .01$ in both cases, Cohen's $d = 0.88$). Reiki and hands-on healing showed significant changes in cortisol levels and cortisol variability ($P < .001$, Cohen's $d = 0.88$). Reiki and hands-on healing showed significant changes in cortisol levels and cortisol variability ($P < .001$, Cohen's $d = 0.88$). **CONCLUSIONS:** Reiki and hands-on healing are effective in decreasing fatigue and cortisol variability in breast cancer survivors. **KEYWORDS:** Biofield therapies, complementary medicine, fatigue, cortisol, breast cancer, complementary and alternative medicine, randomized controlled trial.

INTRODUCTION

Cancer-related fatigue (CRF) is among the most frequently reported and most disabling side effects associated with cancer and cancer treatment, and continues to be a pervasive problem even during remission.¹ Approximately 1% of patients experience significant fatigue for 6 to 12 months post-treatment.² CRF is also associated with decreased quality of life (QOL)³ and associated has been associated with depression and mood disorders.⁴ Although the biology of CRF

Qi gong

Fay McGrew



Art therapy

Complementary Modalities (cont)

- Art therapy
- Pet therapy
- Music: Sound Therapy
- Humor: Laughter Yoga
- Journaling
- QOL: Quality of Life
- Spirituality and Cancer
- Power of Prayer



Alessandra Colfi, Ph.D.



Hope Made Visible (HMV)

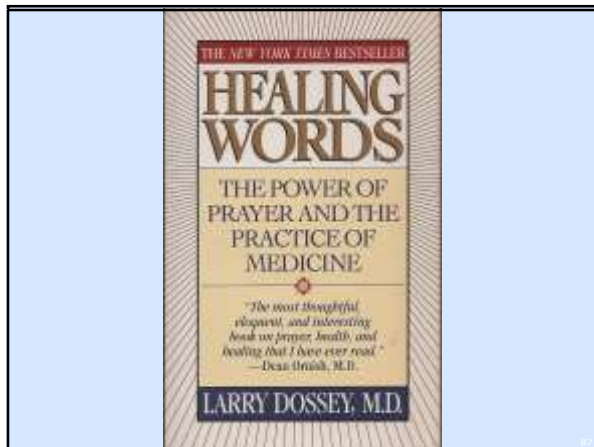
SDCRI International Program. Alessandra Colfi, Ph.D.

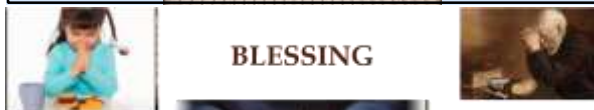
More than 1,000 Flags

Artful Bra Program
Alessandra Colfi, Ph.D.









- ✓ Water
- ✓ Food
- ✓

Medicines

Supplements





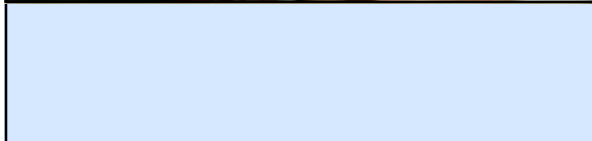
Chemotherapy Radiation
Therapy Everything and
Everyone!

Integrative Modalities mechanisms and effects

- Immune modulating
- Anti-inflammatory
- Endorphin producing
- Hormone regulating
- Antioxidant
- Induce apoptosis
- Antiangiogenesis
- Epigenetic effect
- Restore balance and harmony
- Goal is Synergy: improve medical Rx outcomes
- Often results can be "practitioner dependent"

Gracie (with Norma Spencer)







Isabella (with Teri Polley)



Taking care of ourselves

Apply what we learn from all healing traditions

"Practice what we preach"

Wounded healers

Patients as Teachers

Crying with staff and patients. Grieving

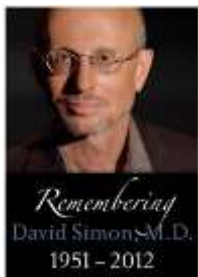
Dealing with stress, helplessness, overwhelm, burnout. "Compassion fatigue"

Challenges in the medical environment

Embracing uncertainty

Accepting cycle of life and death

Important Role of Hospice Team (poem)



O. Carl Simonton, M.D.



Jeremy Geffen, M.D.

Challenges with cancer



- We can do everything right and still develop cancer
- Children with cancer
- Healers with cancer
- Resistant tumors. Recurrent cancers
- There is always Hope
- The importance of QOL
- The Blessing of Palliative Medicine and Hospice Teams



What can we tell Patients



◆Honor all your feelings

◆Trust your powerful inner wisdom, intuition.

◆Be with those who make you feel joy, peace

◆Do not compare yourself with others

◆Accept help. You are always giving

◆Visualize your potential for infinite possibilities and healing

◆Message of hope: for any condition considered "incurable" at this time, an answer may be around the corner

◆Miracles do happen

◆Spontaneous remissions



How to help someone with cancer

• You know how!

• Being present with intention

• Empathy. Compassion

• Healing and Curing

• Respecting beliefs and cultural differences

• Non verbal: embracing uncertainty, hope, belief, faith

• Help transform disease into ease (St. Francis prayer)

• Entrainment, limbic resonance, mirror neurons



Integrative Oncology Program at SDCC and SDCRI

- Created in 1995. At SDCC. Under same roof
- First modalities: support groups, massage, acupuncture, nutrition classes
- San Diego Cancer Research Institute (SDCRI): Non-profit created in 2000: www.sdcricri.org
- Volunteers: devoted experienced certified practitioners of the many healing arts who have successful practice
- Integrative services offered for free; open to all patients
- Community based Integrative program
- Up to 50 volunteers at one time
- Coordinator: Mary Hollander, R.N.





Integrative Oncology Program at SDCC and SDCRI (cont.)

- Regular meetings with practitioners of all the healing arts
- Learn from each others profession and experience
- Support each others journeys
- Educational programs for patients and for the practitioners
- Appreciation dinner twice a year
- Co-creating an optimal healing environment



Appreciation for SDCRI Volunteers

- Yoga: Daniela Caniglia, Justine Shelton
- Nutrition: Mary Hollander, R.N., Jessica Leibovich
- Massage: Teri Polley R.N., Raquel Ramos, Maureen Miner, Cathy Ziska, Yukari Kono, Angelic Rendon, Dana Wylie, John Chang
- Acupuncture: Kim Taylor, Dodie Hemingway, Joe Voss, Mary Fong, John Chang
- Support Groups: Dr. Paul Brenner, Maura McBratney, Erin Graves
- Mindfulness: Diana Shimkus, Pete Kirchmer
-
- Art: Alessandra Colfi Ph.D., Juli Shelton
- Qi gong: Fay McGrew, Reyna Lerma
-
- Biofeedback: Suzie Lemmons
- Biofield Therapies (see separate slide)
- Pet therapy: Norma Spencer, Teri Polley, R.N.



Integrative Oncology Program at SDCRI



Biofield therapies volunteers at SDCRI

- Mary Hollander, R.N.
- Daniela Caniglia
- Maura McBratney
- Blanca Noel
- Lynn Sawyer
- Eric Sjoberg
- Janice Motley
- Maria Melendrez
- Todd Sargeant
- Natasha Jaksch





Role of an Integrative Oncologist

Support cancer patients in creating integrative treatment plans during and after conventional cancer treatment
Reviewing Integrative programs and resources

Help them sort out so much data and info (confusing for all)

Advising patients about benefits and possible risks of all options and treatment modalities

Help patients embrace chemotherapy and conventional medical recommendations

Empowering patients. Hope. Balance. Peace of mind



Role of an Integrative Oncologist

Support oncologists, nurses and cancer center staff. Recommend integrative approaches and co-create healing programs for their own wellbeing

Answering many questions regarding integration

Education: students, residents, fellows

Workshops. Seminars. Conferences

Integrative Research



Future of Integrative Oncology in San Diego

- Clinical, Education, Research, Service
- Evolving collaborations: SDCRI, UCSD, Scripps, Chopra Foundation, Miraglo Foundation, Sharp, Kaiser, Private Oncology clinics, etc.
- Research collaboration within UCSD: U.C. SDCC, CIMH, Moores, CERTIH and other UCSD departments
- Research collaboration with other community programs
- Embracing Integrative Oncology as a Specialty
- Further collaboration with other Institutions

"The good physician treats the disease; the greater physician treats the patient who has the disease"

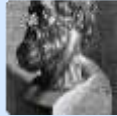
Sir William Osler, 1849-1919



"It is more important to know what sort of person has a disease than to know what sort of disease a person has"

"Make a habit of two things: to help; or at least to do no harm"

Hippocrates, 460-370 BC



Summary: Cancer experience

~ Honoring our body's need to rest, recover and heal

~ Meditation. Inner peace. Embracing uncertainty

~ Practice healing modalities regularly (one or just a few)

~ Add tools to the Toolbox: techniques, experiences, lessons

~ Embracing all wisdoms: medicine & all healing modalities

~ Feel in control. Empowered

~ Balance. Avoiding extremes

~ Accepting help

~ Connection. Know you are loved



Recognition and Gratitude

Staff, Nurses and Colleagues of the San Diego Cancer Center (SDCC, now U.C. San Diego Cancer Services) and Medical Group of North County (MGNC)

Volunteers of the San Diego Cancer Research Institute (SDCRI)

UCSD: U.C. San Diego Cancer Services Encinitas and Vista, Center for Integrative Medicine and Health (CIMH), CERTIH, HI-Med, U.C. Moores Cancer Center

All centers for Integrative Medicine and for Healing in San Diego

Honoring cancer Patients and their families

Caregivers and Caretakers

Professionals and practitioners of all the healing arts caring for cancer patients (especially Angel Nurses)

Volunteers

Researchers

My Wife, Kids, Family and Friends

"Make a gift of your life and lift all mankind by being kind, considerate, forgiving, and compassionate at all times, in all places, and under all conditions, with everyone as well as yourself. This is the greatest gift anyone can give."

— David Hawkins, M.D., Ph.D.: Psychiatrist, physician, spiritual teacher, lecturer



Recognition and Gratitude (cont.)

To Mark J. Adler, M.D.: my colleague, business partner, dear friend and cofounder of the San Diego Cancer Center (SDCC, now U.C. San Diego Cancer Services Encinitas and Vista) and San Diego Cancer Research Institute (SDCRI)

My deep gratitude to all the Volunteers of the Integrative Oncology Program at the San Diego Cancer Research Institute (SDCRI) who devoted countless hours of selfless service to the cancer patients for over 15 years. They did this with great love and compassion.

Special mention and gratitude to Mary Hollander, R.N., our Integrative Program coordinator for the last decade. We couldn't have done it without you Mary!

Inspiration

"There is a voice in the Universe urging us to remember our purpose for being on this great Earth. This is the voice of inspiration, which is within each and every one of us."

DR. WAYNE W. DYER



