

CAM Integration into Complex Practice of Cancer Patients

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According to an European survey's data (2008) about use of complementary and alternative therapies in cancer patients suggest that CAM is popular among cancer patients with 35.9% using some form of CAM (range among countries 14.8% to 73.1%). A heterogeneous group of 58 therapies were identified as being used. Herbal medicines and remedies were the most commonly used CAM therapies, together with homeopathy, vitamins/minerals, medicinal teas, spiritual therapies and relaxation techniques. Herbal medicine use tripled from use before diagnosis to use since diagnosis with cancer. Multivariate analysis suggested that the profile of the CAM user was that of younger people, female and with higher educational level. The source of information was mainly from friends/family and the media, while physicians and nurses played a small part in providing CAM-related information. The majority used CAM to increase the body's ability to fight cancer or improve physical and emotional well-being, and many seemed to have benefited from using CAM (even though the benefits were not necessarily related to the initial reason for using CAM). Some 4.4% of patients, however, reported side-effects, mostly transient.

Which therapies can offer CAM for cancer patients? (We signed them in red color.)

- Mind-Body Medicine- Practices based on the belief that your mind is able to affect the body
 - Yoga
 - Visual Imagery
 - Aromatherapy
- Biologically Based Practices- Therapies derived from nature
 - Aromatherapy
 - Nutrition
 - Herbal Teas
 - Supplements
- Manipulative and Body-Based Practices- Therapies that involve manipulation of one or more parts of the body
 - Massage
 - Reflexology
- Energy Medicine- Practices based on the belief that the body has energy fields that can be used for healing and wellness
 - 3 Integrative Strategies for Cancer Patients
- Whole Medical Systems- Healing systems and beliefs that have evolved over time in different cultures and parts of the world
 - Ayurvedic Medicine: Yoga, Herbal Medicine
 - Traditional Chinese Medicine-TCM: Acupressure, TuiNa, Nutrition, Acupuncture
 - Homeopathy

Reminding to a conference in New York City, COulmbia University last year the effect of above mentioned therapies can influence the follows:

- Yoga poses and breathing exercises to increase energy and manage shortness of breath
- Acupuncture and Acupressure points to reduce nausea, vomiting, and pain
- Aromatherapy (essential oils) to decrease feelings of nausea and anxiety
- Nutrition strategies to help manage loss of appetite, depression, and hot flashes
- Massage techniques to aid in relief of lymph edema, constipation, and loss of libido
- Reflexology applications for neuropathy, headaches, and insomnia
- Dietary supplements to improve symptoms of „chemo brain”, fatigue, and radiation burns

In our recent study we apply CAM and oncothermia together with mutual research on cancer patients. One of CAM therapies is acupuncture with permanent stimulation. Research on

acupuncture began in the United States in 1976. Twenty years later, the US Food and Drug Administration (FDA) approved the acupuncture needle as a medical device. Many illnesses are treated with acupuncture. (WHO:37)

In cancer treatment, its main use is to control symptoms, including the following: Acupuncture is usually used as an addition to conventional (standard) therapy for cancer patients.

- Pain (for a time only according stage of disease)
- Fatigue
- Nausea and vomiting caused by chemotherapy
- Weight loss
- Anxiety
- Depression
- Insomnia
- Poor appetite
- Dry mouth-xerostomia
- Hot flashes (mamma, prostata cc.)
- Nerve problems
- Constipation / diarrhea

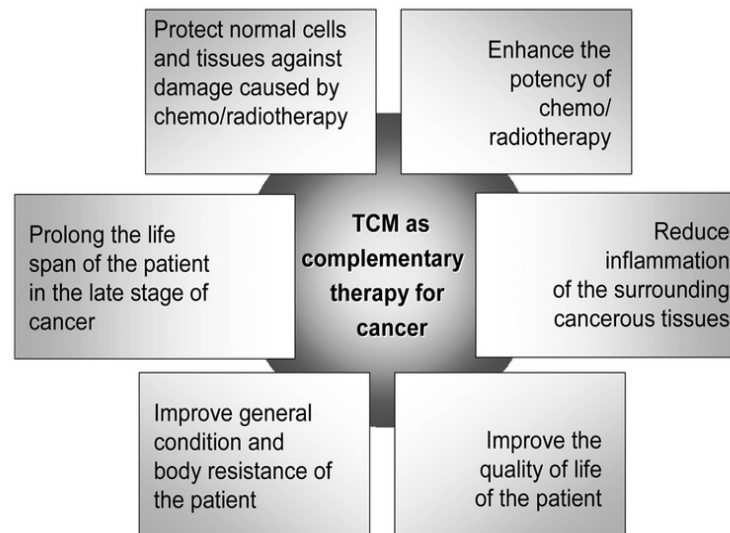
Why have been involved into complex treatment of cancer patient CAM therapies? Reason is because we faced on several side effect of necessary chemotherapy which are common base of following symptoms:

- Haemopoiesis: (anaemia, neutropaenia, thrombocytopaenia)
- Gastrointestinale (oral mucositis-stomatitis, nausea, vomitus, poor appetite, loosing weight diarrhoea, obstipation)
- Skin: loosing hair, „hand-foot syndroma”
- Neurological: neuropathy, - „Chemo Brain”,
- Cardiotoxicity
- Tiredness
- Endocrine symptoms

A retrospective survey study involved patients of an oncology clinic who were offered acupuncture treatment for potential palliation of symptoms. Ge AX, Ryan ME, Giaccone G, et al.: Acupuncture treatment for persistent hiccups in patients with cancer. *J Altern Complement Med* 16 (7): 811-6, 2010.) Among 89 patients treated with acupuncture, 79 responded to a telephone questionnaire survey. The data indicated that the major reasons for referral included pain (53%), xerostomia (32%), hot flashes (6%), and nausea/loss of appetite (6%). Sixty percent of the patients showed at least 30% improvement in their symptoms, and about one-third had no change in the severity of symptoms. Patients were not questioned regarding acupuncture treatment expectations. In CHINA several well-controlled herbal medicine are used for cancer disease, one of them is YQFS. A Chinese herbal formula, Yi-Qi-Fu-Sheng (YQFS), has long been employed clinically to treat cancer patients. We aimed to determine its effectiveness as a treatment method for colorectal cancer. We investigated the therapeutic effects of YQFS on colorectal cancer, as well as the underlying mechanisms, which have not previously been explored. First, YQFS was extracted and chemically characterized. We then tested the effects of YQFS on proliferation and migration by MTT and transwell migration assays in vitro. Mouse xenograft models of colorectal cancer were established by inoculation with HCT-116 cells, and mice received one of three oral doses (200, 400 and 800 mg/kg/day) to evaluate the effects of YQFS extract. Metalloproteinase-2/9 (MMP-2/9) expression in mice was evaluated by gelatin zymography assay. Apoptosis was evaluated by flow cytometry (FCM) analysis in vitro and by TUNEL assay in vivo. ERK and p-ERK expression were evaluated by western blot analysis at the protein level in vitro, and by quantitative RT-PCR at mRNA level in vivo.

Results show that YQFS significantly inhibits colorectal cancer cell proliferation and induces apoptosis and cell cycle arrest at the G1- and S-phase in HCT-116 cells. Furthermore, YQFS effectively retards tumor cell migration and invasion by inhibiting metalloproteinase-2/9 (MMP-2/9) expression, both in vitro and in vivo. Moreover, YQFS had an inhibitory effect on tumor growth in vivo, and induced apoptosis through the inhibition of the ERK1/2 pathway both in vitro and in vivo. Conclusion: These findings demonstrate that YQFS extract has an anti-tumor effect in colorectal cancer, which could be attributed to ERK1/2-dependent inhibition of MMP-2/9 expression.

What are the main targets of CAM usage in cancer?



The main features of TCM effects in Western perspective are:

- Enhance immune function
- Restore the balance of the endocrine system
- Promote blood production
- Protect the marrow & the function of the Heart, Liver & Kidneys
- Improve absorption in the digestive tract
- Boost the metabolic function
- Stimulate the body's self-regulating ability
- Reduce the side effects of surgery, radiotherapy & chemotherapy while improving their effectiveness.

TCM Treatment of Tumors according Chinese patterns in TCM and their solutions:

Phlegm-Damp, – Transform Phlegm & Dispel Damp.

Liver Qi Stagnation, – Sooth Liver & Regulate Qi.

Blood Stasis, – Invigorate Blood & Transform Blood Stasis

Heat Toxicity, – Clear Heat & Resolve Toxicity

Spleen/Kidney Deficiency, – Tonify Spleen & Kidney

Qi & Yin Deficiency (Qi & Blood Deficiency,) – Tonify Qi &

Evidence based arguments for use TCM are the follows: (NICAM, USA, 2012

The strongest evidence of the effect of acupuncture has come from clinical trials on the use of acupuncture to relieve nausea and vomiting. Several types of clinical trials using different acupuncture methods showed acupuncture reduced nausea and vomiting caused by chemotherapy, surgery, and morning sickness. It appears to be more effective in preventing vomiting than in reducing nausea.

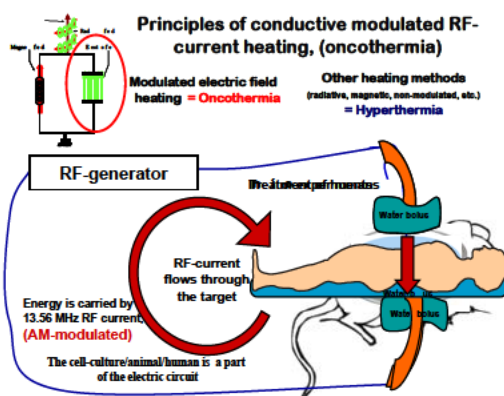
A study of acupuncture, vitamin B6 injections, or both for nausea and vomiting in patients treated with chemotherapy for ovarian cancer found that acupuncture and vitamin B6 together gave more relief from vomiting than acupuncture or vitamin B6 alone.

A study of acupressure for relief of nausea and vomiting was done in women undergoing chemotherapy. The study found that acupressure applied to an acupuncture point with a wristband helped to decrease nausea and vomiting and reduced the amount of medicine the women used for those symptoms.

A study of acupuncture for relief of nausea and vomiting was done in patients undergoing radiation therapy. Patients who received either true acupuncture or sham acupuncture were compared to patients who received standard care. The study found that patients in both the true and sham acupuncture groups developed less nausea and vomiting than those in the standard care group.

In our daily practice we use oncothermia and TCM parallel for patients.

RF - TARGETED ONCOTHERMIA + TCM



Bingsheng H, Hegyi G, Ji'an L, Szasz O, Szasz A, : Oncothermia and Traditional Chinese Medicine
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The unique acupuncture technique which was introduced in 1998 into our daily practice in Yamamoto rehabilitation Institute (Budapest) we apply a special absorbable monofilament (MAXON-M-) as permanent point stimulation to the acu-point which „disappeared” (e.i. absorbed) in 3 weeks, to allow us perform the intervention rare, 1 time/month. The procedure is side effect and has no significant pain during applicaiton. Equipment is a special needle with lument, inserting the small part of monofilament into this lument and leaded into acu-point place to the skin.



Diagnose: Cc. prostatae withosteolytic. metast. LIII-LIV. Vertebrae



Diagnose: Cc. ovarii with metast. vertebrae LIII-IV.

The our basic protocoll is:

1. chemotherapy-parallel with oncothermia in the same day
2. oncothermia 2 times a weeks after that (for a time, depending from stage and size individually)
3. permanent acu-stimulation, 1/per month.

Summary

Potential of the synergy of high-tech OTM and TCM is extremely huge. Recognition of the distortions in the healthy tissue as well as the manipulation of the feedback mechanisms base common principles and possibilities in TCM and OTM. The synergy of the ancient knowledge and the high-tech state-of-art of the medical knowledge could be established.

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