Oncology Association of Naturopathic Physicians 2013 Convention, Phoenix, Arizona - Selected Presentation Summaries: Golden Nuggets and Meaningful "Take-aways"



Presented by Rick Shapiro

Note: Much of the information specified, herein, is derived from various studies and documented in peer reviewed journals, according to the presenters of the subject conference. I have encapsulated the information into "bite size nuggets" for easier comprehension and digestion. I have chosen what I believe is the most important information.



Melatonin Update, Dr. Dugald Seely, ND

Food and melatonin – There are a wide variety of foods with decent quantities of meltatonin. Grapes and Montmorency cherries are good sources. They should significantly improve sleep.

<u>Antioxidative Power</u> – Melatonin promotes the production of several intracellular antioxidant enzymes, including glutathione and others.

<u>Under Oxidative Stress</u> - Melatonin is a more effective antioxidant than Vitamin E, Beta Carotene and Vitamin C. Melatonin also helps inhibit translocation and binding of NFKb to DNA. Melatonin also inhibits transcriptional activation of pro-inflammatory enzymes COX-2, MMPs, and iNOS.

Immune System and Cancer (T-Cells and NK Cells) – Anti tumor responses of the immune system in cancer patients, are generally attributed to the activation of tumor specific T cells, both CD4 and CD8. There is also evidence that the presence of tumor infiltrating T-cells is associated with a favorable prognosis in several types of cancer. The activation of T cells is a highly regulated process commonly provoked by the expression of transformation associated antigens on the cell membranes of neoplastic cells. NK Lymphocytes play an important role in inhibiting tumor growth and metastasis.

Immune System - Decline in immune function is shown to increase the risk of cancerous growth.

Melatonin and Immune System - Melatonin plays a positive role in supporting the immune system in the elderly and in immuno-compromised situations.

"Light Impact" on Cancer - A number of studies show reduced risk of Breast Cancer with people who are blind; "light pollution" in industrialized nations contribute to increased risk of breast cancer. Light – breast cancer hypothesis supported by experimental studies on rats – 7 fold increase in tumor growth under constant illumination. (Blask et al. Breast Can Res Treat. 2003)

Major study - Using Melatonin alone or with chemo was beneficial to survival rates, treatment response rates and disease progression; Melatonin alone or in combination with chemo also may reduce side effects of therapy or symptoms caused by cancer.

Safety with conventional therapy - no negative interaction with most chemo, radiation therapy and no evidence to suggest impaired wound healing or increased risk of infection after surgery.

Some contraindications - autoimmune conditions and in pregnancy; patients taking immuno-suppressants; taking hypnotics, sedatives, anticoagulants, anti-diabetic agents, anticonvulsants, anti-hypertensives

Dosing - .3mg (physiological) to 50 mg (pharmacologic) based on rationale – Lower doses for sleep and jetlag issues; Higher doses, i.e, 20 mg for cancer; Timing – 20 minutes to 3 hours before sleep (Deane. Vital Link. 2012); Higher doses associated with vivid dreams and drowsiness in some;

Meditation – Meditation possibly beneficial in cancer and through meditation, melatonin production is shown to be increased in patients with Breast Cancer and Prostate Cancer.



Metformin: Old Drug, New Trick, Dr. Davis Lamson, ND

Prevalence of Metformin - Metformin was originally used for diabetes patients starting in 1957. There are over 1,100 papers devoted to Metformin according to www.pubmed.gov; half of them since 2005.

Metformin Engenders Good Results with Different Cancers - Dealing with cancer stem cells, the "holy grail" of the future; Metformin kills cancer stem cells in 4 genetically different breast cancer lines. Metformin activates "p53".

Evidence supports Metformin is helpful to ovarian cancer patients. Metformin decreases breast cancer incidence and mortality in diabetics. Metformin induces apoptosis with triple negative breast cancer patients. Good results with colorectal cancer patients, as well as prostate and lung cancer patients.

Diabetics - Great safety record exists with diabetes patients. This speaker gives it to patients who are not diabetic and has had no problems, at all.

Honokiol in the Integrative Treatment of Cancer, Dr. Isaac Eliaz, MD



Promising Future - Cancer therapy, compound, has a direct cancer killing effect on a wide variety of cancers. This is a very exciting compound with great promise.

Similarities to High Dose Vitamin C - Selective pro-oxidant (direct cytotoxic effect), like high dose intravenous (IV) vitamin c, against cancer cells, but anti-oxidant against normal tissue. Can use in conjunction with high dose vitamin C, IV;

Brain Cancer - It is well absorbed and crosses the blood-brain barrier, therefore, it may be effective against brain cancer.

Chemo and Radiation - It is safe to be used with chemo and radiation.

Supplement Use vs. Honokiol - It is a good idea to change the nature of supplement use every 21 days during chemo, except you can use Honokial all of the time.

Mind – Body - Stress induces cancer, "mind work" can help reverse cancer, take deep breathes, be open.

Clinical Update: Aspirin Use in Cancer Care, Tina Kaczor, ND



Aspirin Takes Time - It takes approximately 5 years of use before it brings about a significant effect. The positive results increase with age.

Low Dose - Low dose and slow is the way to go, based upon observational and randomly controlled trials and studies. 75 mg is fine, more is not better

Results Count - Outcome data is more important than "mechanism" data (how it works), that is what counts.

Panel Comments: General

Dr. Eliaz – don't give melatonin during the day, give low doses of around 10-40 mg

Dr Rubin - suggests using the "Greek Lab" for CTC and Chemo-sensitivity tests.

Dr. Eliaz Disagrees with Dr. Rubin - he does not like the "Greek Lab", he prefers Dr Nagourney and Dr Weisenthal's labs; he also like the Caris test which is covered by insurance.

Dr Kaczor - believes curcumin and boswellia are very beneficial agents.



The Adapted Cell, Dr. Greg Nigh, ND

Glutamine – Dr. Nigh - Never give Glutamine to cancer patients. He says it is a primary fuel source for cancer cells. He says cancer cells will not divide in culture without glutamine.

Dr Lise Alschuler - somewhat disagrees with Dr. Nigh, about Glutamine.



Melanoma: Biology, Diagnosis and Treatment, Dr. Paul Reilly, ND

Therapeutic Progress Timing - Some therapies offered by Naturopathic Doctors or other Integrative/Alternative Doctors is measured in years, without the horrible side effects of chemo. Chemotherapy progress is measured in months.

Avemar - is a good supplement (fermented wheat grass extract) with no side effects.

Chemo Supplements - His patients take serious supplements up to the day before chemo and starting again, the day after chemo.

Melanoma Lesions - Melanoma metastasizes fast and early, get rid of those lesions. "Frequently, melanoma appears where "the sun don't shine" ...

Pro-Active Surveillance: Using Natural Agents and Careful Monitoring to Safely Avoid Radical Treatment of Early Prostate Cancer, Dr. Michael



Uzick, ND

Dr Uzick's Philosophy - promotes "active surveillance" and the implementation of more gentle (non-radical therapies, i.e., chemo, radiation, surgery) naturopathic therapies.

Prostate Cancer Test - PCA3 test is only \$200.00 to \$300.00 now. It can be used before a biopsy. It is hard to get a PCA3 with a Medical Doctor, but it is a useful tool.

Naturopathic Oncology - A Rational Method for Prioritizing Remedies,



Evidence - Dr McKinney wants to see published data, derived from studies and/or case studies. However, he says, evidence based studies are not "the end all". You sometimes must make a judgment call.

Detoxification - Detox is very important. He recommends detox after chemo and in general.

Food Choices - What you eat is critical (he endorses a heavy veggie diet), mind body therapies are very important, appropriate supplements are important.

Optimism - He says "Never give up", mix up the therapies/treatments if the "first line" doesn't work or even if the second line does not work ...

Dr Christina Shannon, ND



Relationships - Relationships are key, good patient to Doctor communication is critical; social support is helpful.

Knowledge - Knowledge is empowering, emotional factors impact outcomes

DCA: Guidelines for Clinical Use, Dr. Akbar Khan, MD



Dr. Khan's Experience - Dr Khan has treated over 1,000 cancer patients with DCA. He is a pioneer in this area.

Promising Research Results - Research is in early stages, but the results, thus far, are very encouraging. There is believed to be a synergistic effect with natural medicine.

Brain Cancer - It penetrates the blood/brain barrier, unlike many other agents.

2007 Paper – tumors were shrunk 75% in rats;

Metformin & DCA - Great synergy with Metformin in breast cancer confirmed in, in vivo studies.

Epigenetic Alterations and Cancer Chemoprevention by Dietary



Polyphenols, Ajay Goel, PhD

Poor Progress - Progress has been quite poor since 1950, in battling cancer.

Environmental & Lifestyle Impact - Japanese people who move to Hawaii experience the same high incidence of cancer; however, before moving to Hawaii, they experience a low incidence of cancer. This points to how the environment, lifestyle and diet impacts one's incidence of getting cancer.

Impacting Genes - Dietary botanicals are clearly epigenetic modulators.

Curcumin and Boswellic acid - are good and hit many molecular targets.

Anti-Inflammatory Lifestyle for Prevention and Treatment for Cancer:



Facts and Fiction, Dr Bharat Aggarwal, PhD 2013 Annie Appleseed Project conference)

(photo of Dr. Aggarwal speaking at

Inflammation - Most diseases are linked to inflammation, not just cancer. Inflammation is fine, unless it gets out of control.

MD Anderson - MD Anderson says cancer can be reduced by 30% - 40% by making lifestyle changes; Dr. Aggarwal says it can be reduced by 95%.

NFkB - At the molecular level NFkB activation is the master switch. It regulates 500 genes. It turns on inflammation. It is linked with chemo-resistance, proliferation, and angiogenesis. NFkB is the enemy within.

Kidney Cancer - We treat people who do not need to be treated. Killing people who do not need treatment. Recent kidney cancer study: more people die when the kidney is removed versus leaving it alone; paper published just last week.

(http://www.uofmhealth.org/news/cancer-kidney-0417)

Plants - Much of modern medicine comes from plants: aspirin, steroids, statins, Metformin, etc. Spices target many things.

Curcmin - Curcumin is an orally bioavailable TNF. Multi-targeter: curcumin – also a chemo sensitizer and radio sensitizer, it protects normal organs. Curcumin – multi targets; drugs – mono target

Updated Information in Naturopathic Oncology,

Dr. Tina Kaczor and Dr. Lise Alschuler, ND's speaking at Annie Appleseed Project conference)

(photo of Lise Alschuler

Based on recent studies:

Eat more fruits and vegetables - risk reduction of getting bladder cancer by 36%; risk reduction of getting breast cancer by 20%

Glycemic Load - Focus on eating foods with a lower glycemic load. Lower all carbohydrate intake to lower risk of colorectal cancer.

Exercise - is a most important lifestyle change to reduce risk of breast cancer and risk of recurrence. Vigorous exercise reduced breast cancer more than moderate activity.

Stress and depression - can create physiological tissue changes that affects tissue inflammation and cancer progression. Stress and depression affect survival.

Ginger - taken before and after chemo, reduces acute nausea. Placebo based study.

Joy is part of therapy.