American Institute of Integrative Oncology
RESEARCH & EDUCATION

Foundations of Integrative Oncology
COURSE

GRAND ROUNDS CALL
With Dr. Nalini Chilkov
October 10th, 2018
Second Wednesday of Every Month
5:30 PM Pacific / 6:30 PM Mountain / 7:30 PM Central / 8:30 PM Eastern

ANNOUNCEMENT: TIME LIMITED OPPORTUNITY

Limited Time Open Access: Special Issue on Integrative Oncology from JACM

A recent special focus issue on integrative oncology deserves a solid read. In light of the recent controversial article in *JAMA* on complementary and alternative cancer therapies, this special issue by *JACM*, *The Journal of Alternative and Complementary Medicine*, a peer-reviewed publication from Mary Ann Liebert, Inc., publishers, puts a lens on possible approaches and potential therapeutic benefits of complementary and integrative medicine in multiple age groups, nations, and special populations. The full text articles in this special issue are only available until October, 24, 2018.

https://todayspractitioner.com/cancer/limited-time-open-access-special-issue-on-integrative-oncology-from-jacm/#.W7tpgi-ZN-V

Clinical Pearl: Beauty and Courage: Talking to cancer patients and their families about life and death

Taboo subjects: A culture of silence and avoidance
What gives you hope? What gives you strength? What gives you courage? Do you have a spiritual or religious practice or philosophy that guides you? Do you have a good support system?

- Intimacy, tenderness, openness with patients - sometimes more than their own family members
- Importance of respecting when someone is ready to discuss end of life
- Health Care Directives PLUS - FiveWishes.org
- LL St 4 BrCA aggressive treatment resistant Prepare by creating a legacy for your children videos, letters, for important life events when you are not there. When to d/c therapy? (myeloablation) To preserve health and/or QOL
- Supporting family members
    - Partner of a young man with brain cancer-starting to have seizures
- Choosing End of Life Palliative Care,The Role of Hospice, The Stigma of Hospice
    - My father's end of life questions How long do I have?
    - Elderly BrCA dx recommended aggressive therapy Whether to receive aggressive therapies or not? QOL End of Life Patients wishes and values
- BS Metastatic BRCA Tx Resistance Liver Failure Cachexia End Of Life Do you have any miracles?
- RG single mother with special needs kids with aggressive Lung CA no will, no estate plan, no plan for her kids
- ST 4 LUNG CA When Can I go back to work?
- Endometrial CA tx resistant mass size of 9 month pregnancy - Preparation for death
- Metastatic Pros CA bone mets after 10 years NED AM I GOING to Die?
- SS St 4 OVCA staying the course after aggressive tx fear of death (mother OVCA, F PanCA)

non-compliance with diet/supplements
- AW BRCA+ aggressive OVCA...why am I still alive?
- JB 12yo Liver Transplant pt post hepatic ca with lung met resection on immunosuppressive drugs… summer camp
- SMcM Recurrent uterine sarcoma...when she realized she was not going to die
- Living with Cancer as a Chronic Illness
- Helping patients stay compliant and engaged

Questions & Answers

CC Raeside: **What do you think of IPT, Insulin Potentiation Therapy?**

Insulin Potentiation Therapy with Low Dose Chemotherapy: Gap between theory and practice.
By administering insulin to dramatically and quickly lower blood sugar stresses tumor cells thereby making them more vulnerable to chemotherapy allowing a patient to receive a lower dose of chemotherapy with less adverse effects. My experience with this has been mixed. I have only seen ONE case where the outcome for the patient was resolution of tumor burden to NED. Sean Devlin, DO is an expert in IPT and does administer CT using this approach.

Dr. Devlin also teaches physicians the theory and method through an IPT course through:

IOIC International Organization for Integrative Cancer Physicians (IOIP)
https://bestanswerforcancer.org/physicians/

They have an annual conference (not limited to or focused on IPT) Usually advanced clinically relevant lectures.

The IPT COURSE CURRICULUM includes The Definition of the Standard of Care; Definition of Integrative Oncology; Basic Chemotherapy and Chemotherapeutic Drugs; The History of IPT; Scientific Overview of IPT and The Mechanism of Malignancy; The Modern Practice of IPT; Intravenous Adjuncts; Monoclonal Antibodies; Testing Methods; Functional Blood Chemistry Analysis; How to Set Up an IPT Integrative Oncology Clinic; and Oncological Emergencies.

October Is Breast Cancer Awareness Month: *Mount Sinai Experts Offer Tips on Early Detection, Screening, Understanding Risks, and Personalized Treatment Options*

https://www.newswise.com/articles/view/701255/?sc=mwhn

Newswise — (New York, September 27, 2018) – Approximately one in eight women in the United States will be diagnosed with invasive breast cancer at some point in their lives, and an estimated 266,120 of them will receive that diagnosis this year.*

However, on average, 90 percent of women diagnosed with breast cancer survive for at least five years, which is why early detection, screening, and personalized treatments are key when it comes to saving lives.**

Thanks to promising advances in precision medicine, improved screening technology, genetic testing, cutting-edge surgical techniques, and targeted and individualized drug therapies that continue to transform the field, women with breast cancer are living longer and more active lives. Mount Sinai has been at the

forefront of this treatment evolution and is the first hospital in the United States to offer the latest clinical trial, the ASPIRE Trial, for patients with metastatic or advanced breast cancer.

Tips for Breast Cancer Prevention

- Limit alcohol and don't smoke. The more alcohol you drink, the greater your risk of developing breast cancer. Limit yourself to no more than one drink a day. Some studies link smoking to an increased risk of developing breast cancer.
- Control your weight. Being overweight or obese increases the risk of breast cancer. This is especially true if obesity occurs later in life, particularly after menopause.
- Be physically active. Physical activity can help you maintain a healthy weight, which in turn helps prevent breast cancer. The recommended activity is 150 minutes a week of moderate aerobic activity, or 75 minutes of vigorous aerobic activity, weekly.
- Limit dose and duration of hormone therapy. Combination hormone therapy that contains both estrogen and progesterone and is given to women after menopause should be avoided.

Understanding Risks and Options

- Know your genes and family history: Five to 10 percent of breast cancers are linked to gene mutations (commonly in the genes BRCA1 and BRCA2) and 15 percent of women who get breast cancer have a family member with the disease.
- More treatment isn't always better: The average breast cancer patient who has a bilateral mastectomy will have no better survival than the average patient who spares the healthy breast by choosing lumpectomy plus radiation.
- Don't overestimate risk: When a woman has breast cancer on one side, it *can* spread to other parts of the body, but only very rarely does *it* spread to the other breast.

A New Era in Metastatic Breast Cancer: Treating Patients With Biologics

ASPIRE clinical trial—a first-line biologic therapy which combines anastrozole, palbociclib, trastuzumab and pertuzumab in metastatic hormone receptor-positive, HER2-positive breast cancer patients. Amy Tiersten, MD, a breast oncologist at the Dubin Breast Center at The Mount Sinai Hospital who is the lead investigator of the trial, believes that what truly is groundbreaking is avoiding chemotherapy and radiation, and using a regimen that is all biologics. "This protocol combines state-of-the-art anti-estrogen therapy with the antibodies to the Her2neu protein," she said. "What's also novel about the protocol is using palbociclib in the Her2neu positive population to really maximize all biologics. The most exciting part about ASPIRE is that patients can actually have quality of life with metastatic breast cancer."

New Mobile Mammography Program: Breast Screening and Education Van Rolls Into New York City

Mount Sinai's new program brings vital breast cancer education programs and screening services to women throughout the five boroughs. Our multilingual team works with organizations and individuals to tailor services to meet community interests and needs. Health educators and patient navigators work directly with patients who need more help arranging for and completing their screenings. The van is equipped with state-of-the-art 3D mammography equipment which produces images of breast tissue in one-millimeter-thin layers, allowing radiologists to better detect tissue abnormalities. It also uses an information system that makes intake and follow-up communications available in many languages. The goal: to help women 40 and over get annual screening mammograms and diagnose breast cancer as early as possible. It is the only such breast screening program on wheels serving the city. This project is supported with funds from Health Research Inc. and the New York State Department of Health.

New FDA-Approved Treatment Available for Hair Loss

DigniCap scalp cooling system—FDA approved to effectively reduce the likelihood of chemotherapy-induced hair loss in women with breast cancer—in three of its cancer center locations. The DigniCap system is the first and only scalp-cooling device to complete FDA clinical trials in the United States, where 7 out of 10 patients with early-stage breast cancer kept at least 50 percent of their hair.

BOOK RESOURCES:
Radical Remission by Kelly Turner, PhD - describes the traits and lifestyle habits of patients with exceptional outcomes

Exceptional Responders, Outliers, and Radical Remissions by Glenn D Sabin (Also see his book N of One
J Alt Med Comp Care Vol 24 No 9-10 2018, pp 1014-1015 DOI: 10.1089/acm.2018.0334)
(1) patient–doctor communication;
(2) family support; and
(3) the patient's proactive attitude.

Research: Using DNA to Optimize Treatment and Reduce Collateral Damage

https://www.drsusanloveresearch.org/blogs/research-worth-watching-using-dna-optimize-treatment-and-reduce-collateral-damage

Published June 27, 2018 by *The Foundation*

RESEARCH WORTH WATCHING
DR. SUSAN LOVE RESEARCH FOUNDATION

One major problem from much of our cancer therapy is the collateral damage. Not the side effects, such as nausea and vomiting or hair loss, which are typically transient but the long-term consequences of therapy, such as chemobrain and neuropathy. Some of these changes will resolve and many will not. In my case, it's been six years since I received chemotherapy to treat my leukemia, and my sense of taste and smell still haven't returned.

We've long known that not all women diagnosed with breast cancer needed chemotherapy. But we didn't know who. The OncotypeDX test was developed to help women with early-stage, hormone-sensitive breast cancer answer that question. It allowed patients who had a low score to feel confident that they could skip chemotherapy, and its collateral damage. For those who had a high score, the test added additional information about their tumor that suggested the benefits of chemotherapy outweighed the side effects. But for those in the middle, there was a big question mark. It was unclear for this group whether chemo was necessary, or not. They were left in limbo.

Anyone who knows me knows my mantra: the reason we call it research is because we have to keep searching for the right answer. At any one time we are only making our best guess at the moment."
To help those women in the middle get answers they needed, a research team sponsored by the National Cancer Institute, launched a clinical trial called TAILORx. The lowest-risk women had hormone therapy;

women in the middle, with scores between 11 and 27 were randomized to hormone therapy alone or hormone therapy and chemotherapy, and high scoring women had chemotherapy and hormone therapy. In 2015, the researchers reported that after five years, the women in the low-scoring group that showed overall survival rates of 98 percent—affirming the test's effectiveness.

At the 2018 American Society for Clinical Oncology (ASCO) meeting, we learned the results for those women in the middle: hormone therapy was as effective as hormone therapy and chemotherapy. Among this group of women, after 9 years of follow-up, the overall survival rates were 93.9 percent for the women who get hormone therapy alone and 93.8 percent for those who had chemo and hormone therapy.

The study also looked at invasive disease-free survival—a measure of how many women had a recurrence of invasive breast cancer. At nine years, 83.3 percent of the women who had hormone therapy alone had not had an invasive recurrence compared to 84.3 percent of the group that had hormone therapy and chemotherapy. Since hormone therapy causes much less collateral damage, this was good news.

Speaking of collateral damage—it was great to see that there was some research on this topic at the meeting. Over the past few years, researchers have begun investigating how we can use precision medicine techniques to not only identify the best drug to treat a patient's tumor but also the drug that will cause the least collateral damage in that patient. This is an important area of research—and I'm excited to see it taking place. How great would it be if your doctor could do a blood or saliva test to see if you if you are at risk of getting a particular side effect from a specific treatment so they could offer you another option?

At ASCO, I heard about two research studies that are trying to move this area of research forward. The first study was on young men with testicular cancer. For many of these patients, hearing loss from treatment is a significant problem. The study for correlations between certain SNPs (single nucleotide polymorphisms)—variations in a person's DNA—and hearing loss. They found that young men with a certain SNP (pronounced "snip") were much more likely to develop significant hearing loss than men who did not have that SNP. The next step will be to figure out whether there may be an alternative drug or dose that could be used in men who have that SNP to help keep them from experiencing hearing loss.
In a second study, researchers looked to see if they could identify SNPs that could predict which women and men were more likely to have sustained skin changes after radiation. These researchers were also able to identify SNPs that correlated with significant skin radiation changes.

It is exciting to see research that expands the definition of personalized from what's the best treatment to eradicate the tumor to what's the best way to eradicate the tumor and reduce collateral damage. This is the type of precision we need!