Cancer as a Mitochondrial Metabolic Disease

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Access PPT of this Lecture from our website
Proposals

• Cancer is a mitochondrial metabolic disease and not a genetic mutational disease as suggested on NCI website

• Current conventional cancer diagnostic and treatment protocols as well as research models have significant problems and may contribute to overall poor results for cancer patients

• Alternative treatment protocols have the potential to be competitive if not superior to conventional treatments; they should be considered as a primary and not merely a supplementary option for treatment
Change in the U.S. Death Rates* by Cause:
1950 & 2005

* Age-adjusted to 2000 US standard population.
Sources: 1950 Mortality Data - CDC/NCHS, NVSS, Mortality Revised.
Conventional Cancer Therapies

- Emphasis is removing or killing cancer cells with little attention to adverse effects on normal cells

- Modalities include:
  - Surgery
  - Radiation
  - Chemotherapy (Also Insulin Potentiation Therapy)
  - Targeted therapies (Most new drugs: Inhibit enzymes or receptors that are involved with cancer growth); Success so far limited
Focus of Conventional Cancer Treatment

• Destroy cancer cells at all costs
• **No emphasis on prevention, lifestyle, good nutrition, avoidance of pollution and synthetic chemicals**
• Patients often told to avoid all nutritional supplements, as they might interfere with conventional treatment
• Often progress in treating the cancer is measured by tumor shrinkage with CT scans & PET scans—BUT, this is NOT a good measure of progress because it is not well correlated with longevity
Health and Healing: an Alternative or Adjunct to Conventional Care

- The body has the ability to heal itself given the right conditions
- Avoid or reduce toxic substances and toxic energies
- Supply all that the body needs
  - Oxygen (air)
  - Water
  - Food and nutrients
  - Sunlight
  - Optimal PEMF frequencies
What is Cancer According to the National Cancer Institute (NCI)?


• Collection of related diseases

• Cells grow uncontrollably, invade tissues and resist dying, even when old

• **Cancer is a Nuclear Genetic disease** characterized by mutations in
  – Oncogenes-Genes that accelerate growth
  – Suppressor Genes-Genes that suppress growth
  – DNA repair genes
Schematic of Cell

- **Nucleus**: Location of chromosomes
- **Mitochondria**: Super Powerhouses of Cell: Make ATP with aerobic metabolism (uses oxygen)
- **Cytoplasm of Cell**: where anaerobic metabolism takes place (doesn’t use oxygen); also called glycolysis
Diploidy vs. Aneuploidy: Inside the Nucleus of a Cell

**NORMAL CELL**

**TUMOR CELL**

Diploidy-NL  Aneuploidy-CA
Alternative Understanding of Cancer

• Seeing cancer as a genetic disease results in limitations of treatment as evidenced by the failure of conventional oncology to make significant gains over the past 70 years

• Cancer may be viewed primarily as disease due to damage to mitochondria of the cell & not the nucleus; nuclear changes are secondary to damage to the mitochondria

• Leads to profound differences in treatment

• Originally proposed by Otto Warburg MD, PhD in the 1920’s
Otto Heinrich Warburg, MD, PhD

- Won Nobel Prize in Physiology or Medicine in 1931
- Described the fundamental difference between normal cells and cancer cells
- Cancer cells can’t use oxygen to produce energy
- Cancer cells form as a result of low oxygen environment
Fundamental Difference Between Cancer Cells and Normal Cells

- Energy of most biochemical reactions in the body come from ATP molecules.
- Normal cells produce energy primarily by using oxygen; this process occurs in mitochondria.
- Cancer cells produce energy (ATP molecules) largely by glycolysis, the metabolism of sugar without using oxygen, even if oxygen is present (Warburg Effect).
- This metabolic variation is the main difference—unrestrained growth and invasiveness are secondary to this difference.
Oxidative Metabolism Needs Less Glucose

- The Krebs cycle and electron transfer in the mitochondria use oxygen to produce between **30 and 38** molecules of ATP from 1 molecule of glucose.
- Anaerobic metabolism or glycolysis produces **2** molecules of ATP from 1 molecule of glucose.
- Much of the energy for cancer cells comes from anaerobic metabolism due to damaged mitochondria in cancer cells.
- So, **cancer cells need 15 to 19 times more glucose** than normal cells to produce the same amount of energy from a sugar molecule; hence, need for sugar by cancer cells.
- **Excessive sugar drives cancer growth**
ATP Production in a Normal Cell vs. a Cancer Cell

Differentiated tissue

\[ \text{Glucose} \xrightarrow{+O_2} \text{Pyruvate} \xrightarrow{O_2} \text{CO}_2 \]

Oxidative phosphorylation
-36 mol ATP/mol glucose

Proliferative tissue or

\[ \text{Glucose} \xrightarrow{-O_2} \text{Pyruvate} \xrightarrow{5\%} \text{Lactate} \]

Anaerobic glycolysis
2 mol ATP/mol glucose

Tumor

\[ \text{Glucose} \xrightarrow{+/-O_2} \text{Pyruvate} \xrightarrow{85\%} \text{Lactate} \]

Aerobic glycolysis (Warburg effect)
-4 mol ATP/mol glucose

38 ATP Molecules

2 to 4 ATPs
Nuclei of cancer cells in normal cells do not result in cancer cells; but mitochondria of cancer cells in normal cells DO result in cancer cells.

See Lectures at:
https://www.youtube.com/watch?v=sBjnWfT8HbQ &
https://www.youtube.com/watch?v=SEE-oU8_NSU
Cancer Cells Develop in a Low Oxygen Environment

• Cancer cells are not only characterized by being unable to utilize oxygen because of damaged mitochondria, but also develop as an adaptation to a low oxygen environment

• This adaptation develops over a long period of time and becomes irreversible

• What causes a low oxygen environment in our cells?
Causes of Low Oxygen to Cells

• We live in a sea of synthetic chemicals from air, water and food that damage mitochondria and cell membranes, resulting in low oxygen to cells (See: www.ewg.org)

• Harmful PEMF: Electromagnetic radiation-microwaves, ionizing radiation, 60 cycle alternating currents, many more

• Polluted air with lowered oxygen concentration

• Nutrient deficiencies of all sorts

• Synthetic medication
Brian Peskin and “The Hidden Story of Cancer”

- Peskin’s book explains the Otto Warburg theory of cancer and why we have low oxygen in cells
- Cancer is stimulated by a low oxygen cellular environment
- Oxygen content of cells is low when cell membranes are damaged by toxic chemicals and contain ADULTERATED FATTY ACIDS
Adulterated Fatty Acids Increase Shelf Life and Distort Cell Membranes

• In order to increase shelf life, food processing companies, change the structure of the fatty acids in the food (trans FA are one example)

• These “adulterated fatty acids” are incorporated into the cell membranes throughout the body

• If adulterated fatty acids replace parent essential fatty acids, oxygen content of cells can be reduced by 50% (cancer forms over time with 33% oxygen reductions, according to Warburg)
Making **Decisions** about Cancer Treatment

- Extremely **stressful** for patient and family
- Dangers of diagnostic procedures not usually addressed: exposure to radiation from scans, complications of surgical biopsies
- Usually only conventional diagnostic and treatment procedures are offered with an exaggeration of benefits and minimization of risks
- Often patient and/or family ridiculed for considering other options
Downside of Diagnostic Procedures; Main Tool for Assessing Cancer Tx

• Scans emit considerable radiation and radiation exposure causes cancer
  – CT Scan 100 chest x-rays
  – PET Scan 500 chest x-rays

• Size of tumor not good marker for longevity of patient; yet this is what is generally used

• Biopsies cause inflammation and may stimulate cancer growth if CA present or contribute to the development of cancer; infections, bleeding or other complications are common
Clinical Trials: Do They Help the Patient?

- Funded by pharmaceutical companies for products which are patentable
- Natural products generally not funded
- Derivatives of natural products funded (e.g. vitamin D vs vitamin D analogues), but not unpatentable natural products
- For clinical trials, a patient frequently MUST do standard protocol first (e.g. radiation and chemotherapy), which drastically reduces chances of responding to drugs that require an intact immune system
- My observation: Clinical trial investigators seem to be more interested in the clinical trial than the patient
- Patient discouraged from using natural substances along with the clinical trial experimental drug
- My observation: patients in clinical trials do better with supplement support
- Rarely see benefits to patients who are doing clinical trials
An Example: Standard of Care for Stage I & II Breast Cancer: Is it all justified?

- Lumpectomy
- Radiation therapy
- Chemotherapy in some cases
- Anti-hormonal therapy if cancer is estrogen receptor positive (tamoxifen or aromatase inhibitor)
- Possible monoclonal therapy drug (like Herceptin) if HER2/Nu positive
- Let’s first focus on radiation!
Radiation for Breast Cancer: A Questionable Standard of Care

• What is the basis for the automatic recommendation of radiation for any woman undergoing a lumpectomy for breast cancer?
• Reduces risk of a recurrence in the same breast
• Does NOT reduce regional recurrence or distant metastases
• No impact on overall survival with increased deaths from causes other than breast cancer.
• Harmful effects (e.g. heart damage, lymphedema) may occur later
• Many of our patients choose to not do radiation for breast cancer to the dismay of conventional specialists: we have many long-term survivors
Anti-Hormonal Therapy for Breast Cancer

• Approximately 80% of breast cancers have an overexpression of estrogen receptors
• Evidence exists that estrogen will stimulate the growth of these breast cancers
• Standard of care is for oncologists to prescribe oral tamoxifen (blocks estrogen receptors) or an aromatase inhibitor drug (like Femora, Arimidex or Aromasin) for 5 years or more
• Evidence for improved survival exists, but no studies comparing survival of patients with major lifestyle changes vs the anti-hormonal treatments
• Many patients experience severe side effects with these drugs, but oncologists frequently persist in urging patients to continue them
John C Bailar MD, PhD; NEJM May 1997: Chemotherapy has Failed

- Born in 1932-Died Sept 2016; Professor Emeritus at U of Chicago
- MD Yale 1955; PhD statistics 1973 (American University)
- Editor-in-Chief of the Journal of the NCI
- Age adjusted mortality higher in 1990 than 1970
- “The effect of new treatments for cancer on mortality has been largely disappointing”
- Dr. Bailar attacked by the cancer establishment
- Not much has changed since this study was published
Cancer Stem Cells: VERY IMPORTANT

• Cancer stem cells are stem cells that have become cancerous; major reason for conventional failures
• Behave differently than other cancer cells
• Cancer cells constitute only 1 to 5% of solid cancers
• Cancer stem cells are the **only ones that metastasize**

**Resistant to radiation and chemotherapy**

• Cancer stem cells have been discussed only over the last 15 years
• Major reason that shrinkage of tumor is not a good parameter for assessing treatment results; upsets how oncology done today
Cancer Stem Cells Survive and Thrive with Conventional Therapy
How To Inhibit Growth of Cancer Stem Cells

• If chemotherapy and radiation do not sufficiently attack cancer stem cells, what does stop them?
• Anti-inflammatory agents inhibit cancer stem cell growth
• Recent research shows that anti-inflammatory drugs like aspirin, NSAIDS and Celebrex inhibit cancer stem cell growth
• But, they all have bad adverse effects like bleeding
Many Natural Substances Block Inflammatory Stimulation of CSTs

• HERE ARE A FEW:
  – Curcumin
  – Thymoquinone from black cumin seed
  – Sulforaphane and other glucosinolates and isothiocyanates from cruciferous vegetables
  – Vitamin D
  – Boswellia
  – Parent Essential Fatty Acids (LA and A Linolenic Acid)
  – Stabilized aloe vera extract

• So, shouldn’t they play a role in any cancer program? Unfortunately, they are NOT considered in most conventional cancer programs
Questions to be Asked about Treatment Options

• Will **survival time** be increased &/or **quality of life** be enhanced by the proposed treatment?

• What risks are associated with the treatment?
  – Morbidity
  – Mortality
  – Secondary cancers

• Use the best available information in making decisions and don’t stop with clinical trials
What does an Alternative Cancer Program Involve?

• Avoid toxic exposures as much as possible (air, water, food, energies)

• Dietary program-emphasizing whole nutrient rich foods, avoid processed foods and those containing artificial chemicals

• Oral nutritional supplements, including vitamins A, C, & D, Iodine, various minerals that are balanced, various herbs; supplements that harm cancer cells, but not normal cells

• Exercise program

• Program to normalize sleep

• Optimal exposure to sunlight
Alternative Treatment Program-2

- Avoidance of synthetic medications as much as possible
- Detoxification-Bowel, Liver, Skin, Saunas
- Intravenous relatively non-toxic infusions, such as intravenous C, alpha lipoic acid, autohemic ozone therapy, IV ultraviolet blood irradiation, IV peroxide and others
- Energy treatments-BEMER Therapy, Homeopathy, Acupuncture
- Attempt to deal with attitude, stress and spiritual elements
- Deal with dental issues, such as root canals, mercury amalgam fillings, avoidance of fluoride
- Help with decisions relating to conventional treatment
- Trick is to prioritize for the particular patient
What are the Dietary Controversies?

• What should be the relative amounts of proteins, fats and carbohydrates (e.g. high fat, low carbohydrate OR relatively low fat and high unprocessed carbohydrates with lots of fiber?)
• How much of diet should consist of veggies and fruits?
• Should fruits be allowed? If so, how much and what types? (Ketogenic diet can be high in good fats and low in carbohydrates)
• Should raw vegetable juices be used?
• Individualize for particular patient-Plans do not have to be fixed or rigid; consider patients likes and dislikes
Radical Remission: Surviving Cancer Against All Odds: Chapters

- Radically changing your diet
- Taking control of your health
- Following your intuition
- Using herbs and supplements
- Releasing suppressed emotions
- Increasing positive emotions
- Embracing social support
- Deepening your spiritual connection
- Having strong reasons for living
What about Integrative Oncology?

• Keith Block MD of Chicago, integrative oncologist
• Uses the best of conventional medicine combined with “scientifically supported complementary therapies”
• Advocates proven ways to make treatment more effective while reducing toxicity and side effects
• Works closely with conventional oncologists
• Conventional therapy is a given and alternative methods are used to reduce adverse effects
Integrative vs Alternative Cancer Treatment

• Focus of integrative oncology is to improve results of oncologists by improving diet, adding supplements, acupuncture, etc...

• Conventional approach is taken as a given

• I have no doubt based on my 40 plus years working with cancer patients that patients that combine conventional and alternative treatments will generally do better than those doing only conventional treatment

• But, might they do even better by NOT doing the conventional therapy at all in some cases?

• The question most often asked is will the nutritional supplements interfere with conventional treatment?

• Rarely asked is: Will the conventional treatment make alternative treatment results worse?
Some Patients Choosing to Avoid Some Portions of Standard of Care

• Patients left with difficult choices and need to make decisions with insufficient information
• Frequently need to use common sense and what feels right for them
• Many uncomfortable going against conventional suggestions
• Lots of anxiety associated with making decisions about cancer treatment-both conventional and alternative
Laboratory Testing for CA Patients at the Schachter Center

- Basic Testing, such as CBC and Comprehensive Metabolic Panel
- Thyroid Panel
- Cancer Markers (CEA, CA27-29, CA125, PSA)
- 25 Hydroxy D (optimal 60 to 80)
- Random urine iodine
- Urine for toxic metals provoked by a chelating agent
- Homocysteine, C-Reactive Protein, Fibrinogen
- Others
Salvestrols: A Relatively Non-Toxic Approach to Controlling Cancer Cells

• Prof. Dan Burke did research in the UK
• Authored over 200 published research studies
• Early 1990’s-Discovered the enzyme protein CYP1B1 present in cancer cells and not in normal cells (ultimately found this to be true in 26 different cancers); he wondered why
CYP1B1 & the Discovery of Salvestrols

• Hypothesis: **CYP1B1 protects against cancer**
• Research found a group of relatively inert substances found in organic plants (fruits, vegetables & herbs)
• Substances when mixed with CYP1B1 form metabolites that inhibit cancer cell growth
• Most people suffer from a deficiency of salvestrols, which predisposes them to cancer
• Salvestrols have no effect on normal cells which do not have CYP1B1
• Various substances inhibit CYP1B1 and should be avoided when taking salvestrols
• Research done by Dan Burke, Jerry Potter and Anthony Daniels
Effects of Salvestrols on Cancer Cells & Normal Cells

A. cancer cell

CYP1B1

activated Salvestrol metabolite destroys cancer cell

B. normal cell

no harm comes to normal cell

Annie Appleseed March 2017 MBS
Book by Brian A Schaefer-2012

- History of the discovery of CYP1B1 & Salvestrols
- Case histories of patients using salvestrols
- Schaefer met Burke, Potter & Daniels in the early 2000’s & fascinated with CYP1B1 and Salvestrols
- Brian distributes the Salvestrol supplement in North America
Salvestrol Supplement

- No negative effect on normal cells, but toxic to cancer cells
- Potency measured with Point system
- Good organic diet contains about 300 points
- Each capsule is 2000 Points
- Dose depends on severity of condition
What is the Evidence that Salvestrols Work in People?

• No clinical trials or controlled studies; but there are reported and documented case histories
• There are case studies, reported in 3 journal articles by Brian Schaefer
• There are intriguing case histories reported by patients on Salvestrol blogs on the Internet
• Informal case reports given to distributors of Salvestrol, especially in New Zealand
• A number of our own case histories
Salvestrols at Schachter Center for Complementary Medicine (SCCM)

• Using them for only almost 4 years; some patients using as preventive 1 or 2 capsules daily
• We estimate that 350 patients have taken or are taking salvestrols at SCCM
• No apparent side effects noted even in very sensitive people
• Doesn’t seem to work in everyone, as some patients experienced worsening of disease while taking it
• Much more work needed to see limitations of treatment and how well they work with other non-toxic therapies; but results so far very promising
Patient with Anal Malignant Melanoma

- 57 year-old, married professional diagnosed with malignant melanoma of rectum in July 2012; it was surgically removed; history of previous melanoma of skin surgically removed

- Followed by rectal surgeon, dermatologist, oncologist specializing in melanoma, radiotherapist at major medical center

- Radiation recommended and refused

- Examined every few months by rectal surgeon

- 5 year survival for recurrence is zero

- Managed with lifestyle changes and high doses of salvestrols-

  **Doing well at almost the 5 year mark** from diagnosis
Amygdalin = Laetrile = Vitamin B17

- From mid 70’s through 2012, most of our cancer patients used B17; some still do
- I watched narrated film strip: 1974; stimulated my interest
- Film strip available on YouTube at: https://www.youtube.com/watch?v=QeYMduufa-E
Amygdalin with 2 Sugar Molecules bound to benzaldehyde & cyanide
Amygdalin=Laetrile=Vitamin B17

- Cyanide containing nitriloside
- Nitrilosides found in many foods-such as prunasin family (bitter apricot kernels, apple seeds, peach seeds, pear seeds), millet, buckwheat, cassava and others
- Structure-2 sugars, benzaldehyde, cyanide
- Non-toxic when molecule intact
- Cyanide and benzaldehyde are toxic when released
- **Cancer cells have enzymes to release cyanide** and benzaldehyde, whereas normal cells DO NOT (beta glucosidase)
- Can’t be used with salvestrols because B17 inhibits CYP1B1, so that salvestrols won’t work
Amygdalin-2

• Normal cells lack enzymes that remove sugars from the amygdalin molecule
• Normal cells have enzymes to detoxify cyanide and benzaldehyde
• Cancer cells lack these protective enzymes
• Amygdalin tends to attack cancer cells and leave normal cells alone
• Used orally and as IV infusion
• A reasonable plan might be to alternate Salvestrol for a month or two with B17 for a month or two
Studies Suggesting Inverse Link of Vitamin D Levels and Cancer

• 3,000 studies indicating that serum 25 Hydroxy vitamin D levels inversely associated with cancer
• 75 epidemiologic studies
• Vitamin D upregulates or downregulates about 3,000 genes (generally anti-inflammatory and anti-cancer genes)
• Number of genes affected keeps rising!!!
• Vitamin D receptor protein with vitamin D is necessary for producing Macrophage Activating Factor (MAF), which stimulates the innate immune system to attack cancer cells
Vitamin D and the DINOMIT Model

• See video: DINOMIT Theory of Cancer (17 minutes)
  • http://www.youtube.com/watch?v=3GM0CnO6-ds
• Cedric Garland Dr. PH-University of CA-San Diego

• All of the following stages of cancer are affected in a positive direction by up or down regulation of genes
  • D = Disjunction: Uncoupling of Cells
  • I = Initiation
  • N = Natural selection
  • O = Overgrowth
  • M = Metastasis
  • I = Involution
  • T = Transition
Article: The Anticancer Effects of Vitamin K

Alternative Medicine Review; Vol. 8, No. 3; 2003

- Associate of Jonathan Wright MD
- Two forms of vitamin K2 (MK4 & MK7)
- Most interesting to me is his review of K2 (MK4), including in vitro studies, a few controlled trials and case histories
- Most supplements contain K2 (MK7) rather than MK4

Davis Lamson ND; Colleague/Jon Wright MD
Vitamin K2 (MK4) and Cancer

• Both in vitro and in vivo studies show that K2 (MK4) has anticancer effects
• K2 (MK4) inhibits cancer cell lines of liver, colon, leukemia, lung, stomach, lymphocyte, nasopharynx, breast, oral epidermoid, osteosarcoma, glioma, leukemic blast cells
• No effect on normal bone marrow cells
• Several impressive case reports from Japan, using MK4 in doses of 45 mg or more per day
Evaluate Iodine Status and Supplement Carefully

• Check random urine iodine; most Americans are deficient in Iodine; WHO says below 100 is deficient
• Iodine needs to be supplemented carefully
• Safe and effective protocols for iodine administration exist
• Milligram quantities of iodine necessary for anti-cancer effects; virtually all of our cancer patients take some iodine
• See my published papers at our website for a well referenced section on Iodine: http://schachtercenter.com/CSJARTICLE0001.PDF
Mirko Beljanski PhD

• Useful Supplements to Support Cancer Patients
  • Extracts with anti-cancer and anti-inflammatory properties (Pao V and Rovol V)
  • Two other useful non-toxic supplements to help cancer patients
• See: http://www.beljanski.org/engl/ and a section of my paper at: http://schachtercenter.com/CSJARTICLE0001.PDF
• Sylvie lecture yesterday about this topic
Two Herbs with Anti-Cancer Properties

Pao Pereira (Pao V)  
Rauwolfia Vomitoria (Rovol V)
University of Kansas Integrative Medicine Department

- Straddle the conventional and alternative approach to cancer
- Research involving IV vitamin C for cancer along with chemotherapy; See: [http://www.kumc.edu/](http://www.kumc.edu/) and search for integrative medicine
- Series of papers involving pancreatic and ovarian cancers with and without chemotherapy; research supported by the Beljanski Foundation: [http://www.beljanski.org/engl/](http://www.beljanski.org/engl/) Uses modern technology
Pao Pereira and Rauwolfia Vomitoria for Ovarian and Pancreatic Cancer

- Studies both in vitro (cancer cells) and in vivo (animals with cancer), published in 2013 and 2014; herbs showed anti-cancer activity
- Chemotherapy agents also used in studies: carboplatin for ovarian cancer and gemcitabine for pancreatic cancer
- Herbs were as good or better than chemotherapy agents without adverse effects
- Using the herbs allowed for lower dose of carboplatin for ovarian cancer; so the toxicity of the drugs was less
- **But, oncologists, even at the University of Kansas not using these herbs!!!**
- Recent soon to be published research shows herbs to be effective against cancer stem cells
High Dose Oral Vitamin C for CA pts

- 10 grams or more of C extends life of cancer patients by more than 4 times
- Study in the 70’s and 80’s length of life in 100 terminal CA patients receiving at least 10 grams daily of vitamin C compared to 1000 patients who didn’t (8 year study)

Linus Pauling PhD and Ewan Cameron MD: Champions of Oral C for Cancer
Oral Supplements at the SCCM

• Anti-cancer supplements that don’t damage normal cells - salvestrols or B17 (but not at that the same time)
• Fat soluble vitamins like D, A, K2 (MK4)
• Relatively high doses of Vitamin C
• Broad spectrum and balanced vitamin and mineral formula
• Balanced fatty acid formula
• Anti-inflammatory nutrients like Curcumin, Boswellia
• Beljanski herbs
• Many other options, such as high dose proteolytic enzymes, Hoxsey protocol and Essiac protocol
Low Dose Naltrexone (LDN) advocated by Bernard Bihari MD (1931-2010)

- In the 80’s worked with heroin addicts in NYC and found LDN helpful for cancer patients and autoimmune disease
- 1984-Naltrexone approved at 50 mg dose to for treatment of alcoholics
- Dr. Bihari showed Naltrexone in doses from 1.5 to 4.5 mg frequently helped CA pts
- Need a prescription from MD or DO for Compounding Pharmacy to get this
- Little to no side effects: Dosage in evening


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High Dose IV Ascorbate (Vit.C) Drip to Treat Cancer at Schachter Center

• Used at our Center-more than 40 years
• Published clinical cases show treatment plausible
• Dosage of Vitamin C-25 to 100 Grams (our usual maximum dose is 60 grams per infusion)
• Administered over 2-3 hours
• Treatment one to three times a week
• When used with chemotherapy (given by other MDs)-patients feel much better
Bert Berkson MD, PhD-Alpha Lipoic Acid (ALA) and Low Dose Naltrexone

- Early 1970’s Dr. Berkson successfully treated mushroom poisoned patients with IV ALA
- 2006-Long term survival of Pancreatic CA with mets (78 months in 2009); (Ref in above article)
- 2009-3 more cases of Pancreatic CA: good results (Ref in above article)
- Protocol Involved oral and IV ALA, LDN, Selenium, Milk Thistle and B vitamins
Therapeutic Benefits of Baking Soda (Sodium Bicarbonate)

- Normal acidity of the blood is pH 7.35 to 7.55
- Cancer cells form lactic acid and tend to be acidic; cancer cells thrive in an acid environment
- Diet high in vegetables and fruit tend to alkalize the system and discourage cancer
- Baking soda (sodium bicarbonate) has many uses, including alkalizing the body
- Book discusses many possible protocols to benefit from baking soda
Bicarbonate and Lemon Juice

• One protocol we are using involves adding ¼ to ½ tsp of baking soda in an 8 ounce glass of water
• Squeeze the juice of ¼ to ½ of lemon into the mixture and drink 2 to 4 times daily on a relatively empty stomach
• The lemon juice which contains a high concentration of potassium helps to balance the sodium in the baking soda
• The citric acid in the lemon combines with the bicarbonate to form small bubbles of carbon dioxide which accesses cells better than the negative ion bicarbonate
• On 2 weeks and off 1 week to prevent over-alkalization
• Some patients may not tolerate
Bio-electromagnetic Energy Regulation (BEMER)

- Potential game changer for all sorts of medical and/or psychiatric problems
- Increases **microcirculation** all over the body
- This increases oxygen to all tissues and removes wastes throughout the body (**detoxification**)
- Treatment is simple and comfortable involving **laying on a mat for 8 minutes twice daily**; usually one feels only relaxed during the treatment
- Attachments can be used to address local issues
How the BEMER Works

- BEMER devices generate “weak” magnetic fields, which are used as a vehicle to deliver a special pulsed signal (patented BEMER signal) over the entire body.
- BEMER signals are created by the B.BOX control unit and deployed via the “weak” magnetic field.
- The intensity of the “weak” magnetic field is only 100-150μT (microTesla) (A refrigerator magnet = 0.15 Tesla; 1 Tesla = 1,000,000 μT).
Bemer Explained in 5 Minutes: https://www.youtube.com/watch?v=d9p2-iGMDOo
Other Bemer Websites

• Autism:  https://www.youtube.com/watch?v=-e6RlZJQsT8
• Brimhall and Huxtable-  https://www.youtube.com/watch?v=eVkE6em6W4I
• Joshua Berka ND  https://www.youtube.com/watch?v=PySjhviD4Bs  The Academy of Bioenergetics
• Why BEMER is simply the best  https://www.youtube.com/watch?v=TO9aMAzydDM
• How Bemer Therapy can Help You  https://www.youtube.com/watch?v=6R_ZqIHxa6U
Brief Review of Some SCCM Cases

• Patient with **Giant Cell Cancer** of one of metacarpal bones in his hand told surgical removal was the only answer: **completely disappeared** with B17, C drips, magnet therapy and many therapies discussed here: Expert in giant cell cancer at major cancer center told he had never seen anything like this: **20 year follow-up**; Now-60 years old.

• 54 year-old woman-with **biopsy proven ER + breast cancer dx 4 years ago**; surgery, radiation, tamoxifen recommended; **did only alternative treatments**: No evidence of worsening of disease; feels great

• 63 year-old woman first seen in 2003 with breast cancer: had surgery, but no other conventional treatments-Did intensive non-toxic treatment and did well for 12 years; then stopped dietary changes, supplements etc.. **Recurrence 12 years later**
Numerous Prostate, Breast Cancer & Other CA Types Using Alternative Tx

• We have numerous breast cancer and prostate cancer patients who declined conventional treatment and have been doing various alternative treatments for many years and have done very well

• Not all successes—we do have cancer patients whose disease is not controlled with alternative treatments, especially if they have had a lot of conventional therapy
Case History of Lung Cancer, Stage IIIB with Surgery Alone

- 57 year-old woman consulted us in 2007 after having a lobe of her left lung removed for **Non-Small Cell CA of lung**
- Found incidentally on pre-op for shoulder surgery
- Told she was stage IIIB because of the 3.1 cm size
- Advised to have chemotherapy: She refused.
- Large doses of oral Vitamin C, B17, vitamin D, many other supplements, good diet, IV C drips from once a week to once a month
- Retired recently at age 66. Feels great. Continues current program, 9 years after diagnosis of Stage IIIB lung cancer
- Question: **If she had chemo, would she have done as well?**
Sometimes Conventional Cancer Therapy is Helpful-Patient with CLL

• First seen at SCCM in 2012 at age 52
• Rep of pharmaceutical industry
• Diagnosis of chronic lymphocytic leukemia 2010 clinically well, but numerous nodules throughout body
• Didn’t want chemotherapy
• Treated with our protocol of dietary suggestions, oral supplements, LDN, IV C drips; but developed problems
• In 2013, began to require blood transfusions every few weeks because of severe anemia and low platelets, but refused chemo
• Retired at the beginning of 2015
• In August 2015, finally accepted chemotherapy (Treanda) along with our program with great results; no more blood transfusions, platelets normal; Minimal side effects
Benefits of Sometimes **Combining** Conventional and Alternative Tx

- At age 65, now 70, a male computer consultant first consulted with us in 2011
- Diagnosis was metastatic NSMC lung cancer with bone metastases to spine and possible liver mets (Stage IV)
- Had radiation to bone to reduce pain
- CEA at time of diagnosis was around 300
- Referred to us by oncologist (“won’t hurt”)
- Tarceva (erlotinib) started along with our program
Combining Conventional and Non-Toxic Support Program-2

- Our program: C drips with amygdalin (B17, Laetrile-both oral and IV), D, K2 (MK4), extensive supplement list
- Continues to work and function
- CEA down to 5 by end of 2011 (from over 300 at start of treatment) and has remained like this until now
- Tarceva (erlotinib) stopped working and the chemotherapy agent Alimta started
- Jaw infection successfully treated with surgery & 40 HBO treatments. How much did this help cancer Tx?
- Continues to do well, working and acting in a play
National Center for Complementary and Integrative Health (NCCIH) and the National Cancer Institute (NCI)

- “A substantial amount of scientific evidence suggests that some complementary health approaches may help to manage some symptoms of cancer and side effects of treatment. For other complementary approaches, the evidence is more limited”
- **Unproven products or practices should not be used to replace or delay conventional medical treatment for cancer.**
- **I disagree with this last principle**
How Far Can We Go With a Minimum Amount of Conventional Tx?

• Many patients have opted to reduce or forego conventional cancer treatments that are recommended to them
• Instead they follow an approach similar to the one discussed today
• A large number of patients appear to be doing very well with this approach
Summary

• More and more patients are becoming educated as to options regarding a cancer prevention and treatment program
• Many are choosing to forego the standard of care with careful monitoring
• Others combine the standard of care with an alternative program
• We attempt to help educate the patient and partner with them to navigate their care
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You should see PPTs to 3 lectures plus this one. Some repetition, but much more details of certain topics unable to cover in depth today

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