Written Legacies: A Valuable Gift for Those You Love

FROM THE DIRECTOR
ANNE COSCARELLI, PhD

“My experience is that cancer often makes these fleeting moments longer and gives rise to reflections about what is important in life. This process can lead to deeper connections with others, greater appreciation for life, mindful approaches to the moment-by-moment experience of day-to-day living.”

Times of transition—such as the birth of a child or grandchild, marriage or the diagnosis of cancer—are often reflective times and provide opportunities to think about one’s philosophy of life, values and what makes life meaningful. These times are opportunities to communicate about your beliefs and can become a legacy to those who matter the most to you. Legacies by definition are “something transmitted by or received from an ancestor or predecessor or from the past.” Much of the time we think about material legacies that will be left to our children, our siblings, grandchildren, or friends. While it is important to make plans for these legacies, the communication of values is a form of legacy that is often forgotten. I am a strong advocate for the continuous process of communicating values and wishes which can be verbal or written. Written legacies are often one of the most cherished gifts that we can offer to those we care about. A written statement of your beliefs, or love is a powerful communication that can be revisited for years to come. It is a remarkable and lasting gift for someone that you care about deeply.

Not long ago I was cleaning up an old box of papers and I came across a card that my mother had written to me on the day of my Ph.D. graduation ceremony which just so happened to be my 25th birthday. It was a significant time and transition. As I sat reading the card, now 10 years after my mother’s passing, I realized that she had written me a legacy that communicated her values, her wishes for me, and her heartfelt love. It was in her handwriting and as I read it I could hear her voice in my head speaking the words to me. How powerful. The card is now safely placed with my most cherished possessions so that it will never be lost and it is something that I can go back to re-read and plan to give to my children. I now wonder if she knew that she was leaving me a legacy of such import. This found card means so much to me, especially now that I no longer have her available to consult with or talk to.

Cancer is a threatening word. Most everyone reacts to a cancer diagnosis with some measure of fear no matter how good the prognosis. Sometimes those fears are alleviated more quickly and easily, but more often than not they continue to exist in some form as individuals transcend through the many phases of cancer—treatments, recurrence scares, survivorship, recovery and wellness. Fear is uncomfortable because it is inevitably based in the fleeting lifting of a shroud of denial that most of us live with, the shroud that allows us to believe that there is always time and many more days ahead. When that denial is temporarily removed, there is recognition that life may be shortened or controlled, and it raises opportunities for examination and reflection. In these moments, there may be reflection on what legacies will be left. We as humans have the capacity to imagine a world in which we are not physically present and as such it provides opportunities to make choices to those who survive us. The question is, “Will we take advantage of these moments and do something meaningful with them, or will we allow them to be just fleeting moments?”

My experience is that cancer often makes these fleeting moments longer and gives rise to reflections about what is important in life. This process can lead to deeper connections with others, greater appreciation for life, mindful approaches to the moment-by-moment experience of day-to-day living. I strongly support these growth experiences and know that we can all benefit from this type of reflection. Reflection also provides the opportunity to assess what gives life meaning. Meaning is so individualized, yet there seems to be a common yearning to live a life that is meaningful.

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I want to encourage each person touched by cancer to seize these moments and actually begin creating written legacies evolved from these reflections. Legacies of your values and your philosophy of life are treasured gifts and can be helpful to partners, children (both minor and adult), siblings or anyone close to you. In case someone wonders if I live this belief I do. I personally have been writing legacies for a long time—at graduations, transitions to college—and yesterday, while sitting on a plane, I wrote one to my daughter just because I thought it was time to write again. Each time they take on a little different form or emphasize something different. They are often not planned in advance, but rather writings that come from my heart, usually in the form of a letter. I have had the benefit of receiving these too. My oldest daughter wrote me a long letter telling me how much my support has meant to her during her college years and across her life. She gave it to me as a gift on her college graduation. Needless to say, it is deeply cherished.

The concept of written legacies about values rather than material objects is not new and has been termed "ethical wills." Ethical wills have their footings in Jewish traditions whose roots stem from early biblical times and were used to communicate about the practice of religion. There is a growing interest in the development of ethical wills: both spiritual and philosophical. Ethical will making has evolved into business endeavors with web sites, books and other material designed to help you develop your own. While these aids may be helpful to someone accustomed to writing, they are not necessary. The most important task: your heart, your thoughts and feelings; and some way of recording them. In this age, there can be video legacies, but keep in mind that having something to read and reread may be just what your loved one needs. It is a way that your loved ones maintain their relationship with you.

These are some suggestions about things that can be addressed in this type of legacy, but do not wait to create the perfect piece with everything in it. Start with a simple letter. Here are some ideas that you can include, especially if you are having difficulty thinking of what to say:

- What I learned from my family
- What I want you to know about me
- What I hope to have passed on to you
- My spiritual beliefs
- Why I love you
- My hopes and dreams for you
- What I learned from working
- What I am grateful for
- What I learned from my mistakes
- Something I learned from my (parent, grandparent, children)
- Something I learned from a teacher or spiritual leader
- My favorite poems and songs
- My most significant memories from my childhood
- My feelings when you were born
- What I have learned from raising you
- Write a sentence expressing your values on topics such as:
  - Honesty
  - Integrity
  - Friendship
  - Communication
  - Family
  - Recreation
  - Health
  - Spiritual or Religious Beliefs
  - Raising Children
  - Politics
  - Courage
  - Love
  - Marriage
  - What I live for
  - What makes life meaningful to me

Ethical will and written legacies can be just a few sentences or they can be volumes of work accumulated over time. Imagine writing something now and again a few years from now and so on. Many times these legacies are shared during the transitions of life and sometimes legacies can be left in a special place to be discovered later. There are no rules about them; the choices are your own.

As a parent facing a cancer diagnosis, particularly if you have young or young adult children, it is always the time to write a legacy. Even if your prognosis is outstanding, seize the moment and take a little bit of time to write. If you live into your children’s adulthood or mid-life, these legacies will still be cherished and you will have lost nothing. When facing progressing cancer, your message may change. When living on into survivorship and recovery, this too is a time to write: your wisdom and strength gained during your care may offer valuable insights to your children or loved ones. Finally, let me state that legacies are important, no matter your age.

I want to end with my strongest sense of urgency: do this now. The barrier that has to be overcome is the shroud of denial that there is always time and that you will never die. Remember, 100% of all human beings, as of right now, will die at some point from something. No one knows our future, but I am certain that when we each leave this earth, our material objects are only part of what is important for our loved ones and the greatest gift we might offer is our words. Get out a piece of paper and write something. You can write again, there is no law about how many letters you can write, how often, how long or how short. Your children, grandchildren, siblings, or best friends will be comforted by this tangible piece of you that can be read and re-read for generations to come.

Anne Coscarelli, Ph.D.

(The Center is offering a workshop, Ethical Wills: Writing a Legacy For Those You Love, on Wednesday, April 28, from 10am-12pm. Please call (510) 794-6644 for further information or to enroll.)

INSIGHTS INTO CANCER

"CHEMO BRAIN" AFTER CANCER THERAPY: WHAT IS IT? WHAT IS IT NOT?

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This is a summary of a lecture presented on January 13, 2009.

"Chemo brain" might be better renamed "cognitive changes" or "cognitive dysfunction" because not everyone who has cognitive complaints after cancer has had chemotherapy. Patients often report changes in thinking and memory while on chemotherapy. These changes may be in part due to stress and feeling overwhelmed, use of medications, such as Ativan, or other medications used to manage side effects from cancer and cancer treatments. Cognitive changes may persist for years after treatment and concentration long after treatment ends. When this goes beyond six months to a year it becomes more concerning than in the initial months. Cognitive complaints are not just related to chemotherapy exposure, but also to whole brain irradiation and endocrine therapies. Additionally, cognitive changes can be associated with cancer diagnoses evoking fears that cognitive changes (such as difficulty finding the right word), fuzzy memory and trouble sleeping (causing sleep deprivation) are often associated with menopause. When menopause is condensed into a shorter period of time, such as when it is induced by surgery or chemotherapy, the effects may be even more noticeable to the individual. Men report cognitive changes associated with some of the androgen deprivation therapies that are used for prostate cancer, thus strengthening the link between hormonal issues and cognitive alterations. These cognitive changes which affect some patients are real and troubling issues, but the cause and understanding of the mechanisms by which they occur are still not well understood.

Individuals who are definitely at risk for cognitive changes are children and adults treated for brain tumors. Children and adults treated with whole brain radiation are likely to develop cognitive dysfunctions, as are people with leukemia and lymphoma who receive certain intra-spinal chemotherapies.

In 1998, a Dutch study described the results of a neuropsychological evaluation conducted in women who received high dose chemotherapy, standard chemotherapy,
no chemotherapy and women who had never received chemotherapy or had cancer. They found a higher incidence of cognitive test abnormalities in the women who received high dose chemotherapy. Interestingly, the ones who complained the most about their symptoms were not the ones that did the worst on the testing. There was a stronger relationship between complaints and anxiety and depression. Anxiety may interfere with cognitive functioning in some women.

A study was recently conducted that tested people with breast cancer, colon cancer and lymphoma before chemotherapy, after and at ongoing follow-up intervals. Surprisingly, testing revealed that 25% of the individuals had abnormalities before the disease, but they might not have been aware of a decrease in mental acuity before their treatments. There has been some inconsistency in findings about what areas of the brain are affected and little information linking specific deficits to specific drugs. These studies have documented neuropsychological deficits on testing that pre-exist cancer treatment and show the deficits do not all worsen with treatment. The true rate of treatment-associated cognitive decline is uncertain. Currently there is a belief that cognitive changes may be attributable to a variety of causes depending on the individual, their diagnosis and treatments. The cumulative effect of treatment and individual responses may be important. It is hypothesized that anxiety and depression may be a component for some, along with pre-existing genetic factors, changes in estrogen levels, toxic effects of chemotherapy, and the impact of pro-inflammatory cytokines on brain function. In addition, very high functioning people who are used to multi-tasking may be more likely to notice changes as they depend on their brains to process and hold information in complex ways and are often under more pressure to do so. If an individual is in a less stressful environment, the subtle cognitive changes may be less pronounced or less perceived.

In 2004 a small study of approximately 17 women in each of three comparison groups (no therapy, chemotherapy only and chemotherapy + tamoxifen) showed that the women who were treated with both chemotherapy and tamoxifen had the greatest cognitive deficits, but that the chemotherapy alone group also had some declines. When eight subscales evaluating different types of cognitive functioning were combined, the age-matched controls did better than the patients who had chemotherapy.

Research on animals has also been provocative, with short and long-term neural injury being detected in animals exposed to some chemotherapy drugs. Researchers observed both long and short term changes. Animals given chemotherapy showed changes in knockout mice with treatment. A recent brain imaging study done in women with breast cancer illustrated the need for treated women to recruit additional brain areas in response to a memory task, suggesting that it may take a lot more effort to do what someone previously did.

While there is much to be learned still from this research, patients and physicians must actively work together to make the best decisions for an individual before and after chemotherapy. It is important that the current data not be construed to suggest that chemotherapy should be avoided for fear of developing cognitive damage. These changes appear to be relatively small in most individuals. In addition, chemotherapy should be used judiciously when the benefits outweigh potential risks especially in early stage favorable tumors. When patients complain that they are having trouble concentrating and remembering things then they need to be appropriately evaluated and treated accordingly. Anxiety, depression, menopausal symptoms and insomnia need to be assessed and, if present, treated.

The Role of Psychiatric Evaluation and Medications

Cognitive complaints can significantly compromise quality of life for patients both during primary treatment and, in some cases, for many years after. Because of the many potential factors that may influence cognitive changes, it is important to identify symptoms that can be treated that might account for these changes. It is especially crucial to identify and treat a co-existing depression. Depression and cognitive dysfunction can come from hormonal changes or medications such as chemotherapy, steroids, sedatives, anti-anxiety agents, and anti-nausea medications, all of which are frequently administered. Depression can also come from loss associated with the diagnosis and treatment, re-emergence of earlier losses triggered by the diagnosis and feelings of abandonment. The goals of treatment are to improve quality of life, help patients to be partners in their care, strengthen or regain coping resources at all phases of the disease and prevent consequences of severe untreated depression. Depressive is in part assessed by evaluating sleep, interest, enjoyment of activities, guilt, excessive rumination, low self-esteem, energy, concentration, appetite, physical slowing and agitation, as well as suicidal thoughts or actions. Key signs and symptoms of depression are frequent crying, irritability that is out of character for the individual, negative ruminations, anxious/agitated lack of concentration, and changes in general outlook that differ from the person’s usual personality.

There are many medications that are useful in treating depression. The selective serotonin reuptake inhibitors (SSRIs) are generally the first line of treatment for depression. They have few side effects and the spectrum of side effects allows for individualized medication selection. They can also treat anxiety and post traumatic stress disorder that can affect quality of life as well as cognitive functioning. For patients who are being treated with certain chemotherapy agents such as tamoxifen, the medication will need to be further tailored in order to avoid potential drug interactions that could decrease the effectiveness of the cancer treatment.

In certain circumstances, other medications can be used in addition to or in place of antidepressants. Stimulants can sometimes be helpful. However, it is important to evaluate the person for other health conditions such as high blood pressure, cardiac issues, personal or family history of bipolar disorder, and history of addiction. In

Patients often report changes in thinking and memory while on chemotherapy. These changes may be in part due to stress and feeling overwhelmed, use of medications, such as Ativan, or other medications used to manage side effects from chemotherapy.
CARDIOVASCULAR HEALTH AFTER CANCER: CHALLENGES AND STRATEGIES

Barbara Natterson, MD, Associate Professor of Medicine, Director of Imaging for the UCLA Cardiac Arrhythmia Center, David Geffen School of Medicine, and Cardiologist

This is a summary of a lecture presented on February 10, 2009.

With more than 10.6 million cancer survivors in the United States, having researchers and clinicians tending to the cardiovascular needs of these patients is very important. All parts of the cardiovascular system can be affected by chemotherapy, radiation, and surgery. While we have known for some time that some anti-cancer therapies can affect cardiac function, patients may have little choice other than to take these drugs because they are the most effective treatments to address their cancer. The risk/benefit analysis may focus on life preserving treatments for cancer not on potential health problems at a later time. Patients should and can be informed about the effects of cancer therapies on their cardiac function, the types of alterations that may occur because of their treatments and should advocate that they receive full and high quality assessments of cardiac function and treatment.

The cardiac system is made up of the ventricles, conduction system, the pericardium and the autonomic nervous system. The heart is a large muscle that contracts and relaxes, pumping blood through the various chambers of the heart and back out to the lungs, carrying oxygen to the body. The ventricles are the pumping mechanisms, which are stimulated by the conduction system or electrical circuitry. The electrical system is measured by an EKG (electrocardiogram) which determines whether the heart is beating too fast or too slowly. The valves connect the different chambers; they open and close, keeping the blood flow going in one direction. The heart is encased in a sac called the pericardium. The arteries are the large vessels that bring blood to the heart.

Ejection fraction (EF) is a measurement that tells you the physician the capacity at which your heart is pumping. During each heartbeat cycle there are two phases, systole (when the heart contracts) and diastole when the heart relaxes. When the heart contracts, it ejects blood from the ventricles which are called the chambers in the heart. When the heart relaxes the ventricles refill with blood. No matter how strong or forceful the contraction is, having some blood remaining in the ventricle is normal. Ejection fraction is the term used to refer to the percentage of blood that is pumped out of a filled ventricle with each heartbeat during systole. The left ventricle is the heart’s main pumping chamber, and ejection fraction is usually calculated using this ventricle, hence the name left ventricular ejection fraction. A normal ejection fraction is considered to be approximately 60-65% of the blood leaving the chamber after systole. Normal diastolic function is identified by specific parameters on an echocardiogram. Focusing on the “ejection fraction” only tells part of the picture of how the heart is really doing. The diastolic assessment is just as important in post-cancer patients.

Cancer Treatments May Have Effects on Different Aspects of the CV System

Cancer treatment related cardiovascular issues can affect all parts of the CV system: the coronary arteries may be prematurely blocked due to some therapies, potentially leading to heart attacks and angina. Some therapies may weaken the ventricles, leading to congestive heart failure. The conduction system (electrical system) may be damaged potentially leading to fainting or the need for pacemakers. The pericardial sac (in which heart is contained) may suffer damage from other treatments. The autonomic nervous system, which encompasses the neurological control of most of the functioning of our bodies, can also be adversely affected.

Notably, both the contraction phase of the cardiac cycle (systole) and the relaxation phase of the cardiac cycle (diastole) may be adversely affected by some cancer treatments. Echocardiography can identify abnormalities in both systolic and diastolic function if performed properly.

Heart Recommendations for Cancer Survivors

As a cancer survivor you should be actively involved in your follow-up care. Here are some suggestions:

• Know your own treatment exposures and associated cardiovascular toxicities.
• Become a "physician educator" and resource. Some cardiologists may not be aware of the specific cardiac effects of many cancer therapies.
• Access resources for screening that are available through ASCO Guidelines (American Society of Clinical Oncology).
• Know the signs and symptoms of "heart failure" and remember to ask about systolic and diastolic disruptions:
  - Shortness of breath, exercise intolerance, fainting or near fainting, palpitations, chest pain.
  - Ask for a screening echocardiogram and make sure the echocardiogram is performed to look for both systolic and diastolic dysfunction, and pericardial abnormalities.
  - Obtain an EKG to assess for conduction abnormalities. If you have fainting or near fainting spells consider seeing an electrophysiologist (cardiologist with special training in the electrical system of the heart.)
  - Consider autonomic dysfunction as an explanation of "unexplained" symptoms.
  - Educate your physicians regarding the association between cancer therapies and this issue.
  - Depending upon your exposures, ask for screening measures that should include fasting cholesterol, Hg A1C, TG, stress testing, and carotid duplex scanning.
  - Walk, exercise daily and regularly! (unless contraindicated by your doctor)
  - Be aware of "good vs. bad" fats and avoid bad fats.
  - Don’t smoke. If you do, quit.
  - Don’t use any non-prescribed substances.

Editors Note: For assistance with dietary issues, consider seeing the Integrative Medicine Physician, Dr. Mary Hardy in the Simms/Mann — UCLA Center for Integrative Oncology who does educational sessions to help patients and their families make healthy choices related to nutrition and dietary supplementation (310 794-6648). Also, be aware that the VITA program through the UCLA LiveSTRONG Center for Survivorship is available to assist in assessing and making recommendations for survivorship screening and assessment (310-825-9711).
In 1921, Otto Warburg made an important discovery about the metabolism of cancerous cells. He found that the respiration of oxygen in normal body cells is replaced in cancerous cells by a fermentation of sugar. All normal body cells meet their energy needs by respiration of oxygen, whereas cancer cells meet their energy needs in great part by fermentation. From the standpoint of the physico-chemical and physiology of life, this difference between normal and cancer cells is hugely significant. Oxygen gas is the source of energy in plants and animals; in cancer cells that process is replaced by an energy yielding reaction of the lowest living forms, namely the fermentation of glucose. Warburg won the Nobel Prize in Medicine in 1931 for his discovery of the oxygen-transferring enzyme of cell respiration. While this was an important scientific finding, postings on the internet have created misleading and inaccurate conclusions about the relationship of cancer to acid environments and sugar. Warburg’s findings did not state that eating sugar leads to cancer. It is important to understand more about this in order to avoid “diets and cures” that are misrepresented on the Internet.

The human body relies on glucose. Certain organs, especially the brain and the heart, two of our most vital and hard working body parts, consume extremely high amounts of glucose because they require high amounts of energy. For example, if the body does not have enough glucose, it converts other things, such as fatty acids and proteins into glucose. It is true, however, that in comparison to most cells, cancer cells do have a sweet tooth. Cancer cells consume about 20-30 times more sugar than normal cells because cancers are rapidly dividing cells; in order to rapidly divide they need energy. Glucose (sugar) is a rapid energy source so while cancer cells do eat proteins and fatty acids as well, they rely on glucose. The concept that sugar feeds cancer while technically correct is also misleading because sugar feeds every cell in our body. Even if you consume every bit of sugar out of your diet, your body would make sugar from other sources. All cells—healthy and cancerous—need sugar to grow. It helps to remember that there is nothing particular about sugar that “feeds” cancer cells any more than sugar feeds all of the cells in our bodies. The body makes its own sugar. It is not possible to starve a cancer by creating a diet that is absent of sugar.

The Internet, CAM and Myths
The Internet is full of articles, misconceptions and claims that focus on the relationship between cancer cells and sugar. Unfortunately, anyone can post anything on the internet and there is no filter for the facts. Just because something is in print or on the internet does not mean that the information is accurate or meaningful. It is important to turn to the real science to understand what we know. An excellent source for cancer information is the NCI website, www.nci.gov. Many patients want to understand what they can do to help themselves in addition to traditional cancer treatments. It is important to understand that there is no miraculous cure for cancer to be found on the internet—if there were then everyone, including the scientific community, would be using it. Conventional medicine still has the best treatments available for the reduction of cancer growth. However, that being said, complementary and alternative medicine practices (CAM) can be important and supportive adjunctive modalities. It is important to use the same scrutiny that one demands of traditional treatments to examine the value of these other approaches.

PET/CT Cancer Imaging: Cancers Eat a Lot of Sugar
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This is a summary of a lecture presented on April 21, 2009.

PET/CT cancer imaging is increasingly being used in the treatment of cancer patients. PET (positron emission tomography) and CT (computed tomography) are two imaging techniques that provide detailed images of the body. PET imaging is particularly useful for detecting cancer because it can detect small tumors that are not visible on other imaging techniques.

PET/CT images are created by combining the information from the two scans. This allows for a more precise diagnosis and treatment planning. For example, if a patient has a lesion detected on a CT scan, a PET scan can be used to determine whether the lesion is malignant or benign.

Modern Imaging Technologies
Positron emission tomography (PET) is a scanning technique that tracks the uptake of sugar. When you get a PET scan a small amount of sugar, with a small amount of radioactivity attached to it, is injected into your vein prior to the scan. The radioactive tracer usually is a form of glucose, the body’s main source of energy. The PET scanner then can detect the radioactivity, allowing the doctor to see where the glucose is being used by the body.

PET/CT scanners are dual modality scanners that combine the information from both PET and CT scans. This allows for a more detailed and accurate assessment of the body. PET/CT scans are often used to detect and stage cancer, as well as to monitor the effectiveness of treatment. They can also be used to detect other conditions such as heart disease and stroke.

The importance of PET/CT imaging cannot be overstated. It is an important tool to reliable health care providers about the many messages out there to determine the best individualized plan for you. Be careful with the information found on web sites.

Hallmarks of Cancer
What are some of the hallmarks of normal cells and the differences between them and cancer cells? Normal cells all have a built-in mechanism for programmed cell death. This means simply that no cell lives forever; each cell is programmed to emerge, live and then die. When normal cells begin to lose function, they die; cancer cells lose their programming to die. Normal cells depend on growth signals and information from other cells; cancer cells operate and grow independent of these signals. Normal cells do not create new blood vessels, but cancer cells can build new blood vessels in order to supply themselves with the food that they need. Normal cells cannot invade other tissues, but cancer cells can. Normal cells do not travel, but cancer cells can travel through the blood and lymph system and re-establish their growth in other tissues. Normal cells have limited reproduction capabilities, but cancer cells are limitless. Finally, normal cells consume some sugar, whereas cancer cells consume 20-30 times more sugar.

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In 1973 the United States had no PET scanners, but in 2007 there were more than 1500 PET centers across the U.S. The scanners are manufactured by several different companies. Dr. Phelps has been a strong advocate for PET scans and has worked tirelessly with Medicare to establish parameters for reimbursement for PET scans. Originally, registries were created which led to large databases of PET scan results which have been used to determine the benefits of using PET scans. They discovered from this early work that information from PET scans changed the management of disease by about 35%, on average, across all cancers. PET scans are now covered for reimbursement for all initial evaluation and subsequent treatment strategies for breast, cervical, colorectal, esophageal, lymphoma, melanoma, non-small cell lung cancer, thyroid, myeloma, and ovarian cancer. There is currently no coverage for the diagnosis of breast cancer or for prostate cancer, primarily because prostate cancer tends to have a low uptake of sugar.

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PET/CT Scanner

Preparation for PET Scan
It is important to prepare appropriately for a PET scan. Patients are asked to fast for 4-6 hours prior to the scan but are allowed to drink fluids. You should not exercise on the day of or the day before a PET scan because muscles use a lot more sugar and it could cause a more diffuse uptake of the radioactive tracer into the muscles instead of the potential tumor sites, creating a scan that is difficult to read. After the FDG is injected, the current protocol is to have the person rest. They are asked not to speak or walk around and to try to keep warm. Regular medications should be taken on scan day including medications for controlled diabetes. It is important to stay warm during the period that the tracer is in the body because there is something called “brown fat” that is characteristic in infants, young adults and some older adults. When cold this “brown fat” will take up the sugar and that will lead to a scan that is difficult to read. Do not worry if the scanner room is cool. Blankets are usually given, but by the time you are in the scanner the uptake has already distributed itself to the high glucose areas.

The Actual Scan Procedure
Patients who have never had a PET/CT scan wonder what the steps are. Overall, it should take about 2 hours for a scan but can be longer if more views need to be taken or if they are running behind because someone else needed more views. The basic steps from arrival at the clinic are:

- You will be greeted and basic information exchanged
- You will be moved into an injection room
- You will then be injected with FDG
- You might receive oral contrast which would be for the CT scan
- You will then be positioned in a comfortable recliner for about 1 hour and should be kept warm. If you are not warm, ask for blankets.
- You are taken to the scanner (next door)
- You are placed on the scanner bed (the room is fairly cold)
- The contrast material for the CT portion will be injected
- The CT images are taken (less than 1 minute)
- The PET images are taken (around 25 minutes)

PET Scan result. The brain, heart and bladder light up as dark spots because these are high areas of glucose but the dark area identifies a tumor because of its increased uptake of the radioactive sugar tracer.

Concerns and Questions after the Scan
There are very few side effects from these scans. A PET scan may create pain at the site of the IV injection and, very rarely, an infection. About 5% of patients have claustrophobia in the scanner. For patients who are anxious about the scans, benzodiazepines are very effective anti-anxiety medications that can be taken beforehand. Discuss this with your doctor in advance of the scan. The radiation exposure is low and is not dangerous if the scans are used as currently indicated. For the CT component, the IV contrast can cause allergic responses, and patients with kidney problems may need to be careful about the contrast. Oral contrast can cause abdominal discomfort in some patients. Radiation is not dangerous if used as indicated. After the scan you are not radioactive and there is no danger to you or to others around you. You can be in contact with children, pregnant women or anyone else. If you drink fluids it will wash out the radioactive sugar tracer more quickly. You are allowed to eat whatever you want after the scan is over.

Can Imaging Improve the Care of Patients with Cancer?
PET scans are good at picking up on metastatic disease and show the sites where it is located. CT scans show anatomical structures but a mass may not always be cancerous, or even part of it may not be as active as others. Sometimes tumors have portions that die and turn into scar tissue after treatment. The PET combined with the CT can show areas of the tumor that continue to be “hot” where there is more glucose activity. Another advantage of PET scans is that it can determine where a needle should be placed for a biopsy; the detailed information helps direct the radiologist to the “hot” areas. Sometimes a CT scan is very complicated because of all the structures. A small cancer might be missed but will be picked up on the PET scan because those “hot” areas show up. CT scans, MRIs and PET scans differ in their methodologies and, thus, in the results that they show: MRIs use magnetic fields; PET scans use radiation; and CT scans use contrast. Each has a specific purpose and contribution. Your physician will be helpful in making the best choices based on your history. If there are questions, these can be addressed to the radiologist or nuclear medicine specialist. Some medical institutions, such as UCLA, have ongoing communication between the oncologists and the individuals who read the scans, as part of tumor boards and other multi-disciplinary teams. This communication is important because the individual history of the patient may be helpful in interpreting the findings.

Cancer Screening
Cancer screening is a process by which cancers are detected early in asymptomatic people. By catching cancer while still early and asymptomatic we can reduce cancer mortality. Screening might prevent 35% of cancer deaths. In order for a test to be a good screening tool, it needs to identify cancers early, be easily accessible to the public, and demonstrate substantial life saving benefits with a limited amount of additional risk. CT scans are under study for the screening of lung cancer in individuals that are at higher risk of developing lung cancer (previous or current smokers). These results are expected this year. Chest X-rays, as listed below, have not been shown to be beneficial in detecting early cancers and improving outcomes for lung cancer. There is some recent push to include virtual colonoscopy as another screening tool. This method still involves the clean out of the bowel the day before and uses scans rather than a scope. The disadvantage of virtual colonoscopy over actual colonoscopy is that if a polyp is found another procedure will be needed to remove the polyp. There are risks associated with screening. X-rays can cause radiation exposure while colonoscopies can cause a perforation of the colon. False positives (identifying a potential cancer when one is not really there) lead to unnecessary follow-ups which are costly and may have additional risks and discomforts to the individual as more unnecessary procedures are done. A false negative, failing to identify a cancer that is really there, creates false assurances. The current screening techniques include:

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Simms/Mann — UCLA Center for Integrative Oncology News, Spring 2010
Women at high risk for breast cancer—those with a family history, genetic risk as identified by a positive result on a genetic screening and those who have had prior radiation to the chest—should consider starting screenings earlier. While mammograms have clearly shown benefits they, like all screening techniques, are not perfect. Detecting breast cancer in women with dense breasts is much more difficult while using mammograms and is a source of concern. Younger women tend to have denser breasts, but some women continue to have dense breasts throughout their lives. PET, MRI and ultrasound can assist in the diagnosis of breast cancer for women with very dense breasts and those with scars and implants where cancers can sometimes hide. This is an area that needs additional work as PET is not approved in these circumstances and the use of these tools for screening is not clearly defined.

PET and Treatment Monitoring
PET scanning can be very helpful in monitoring the progress of treatment. This was illustrated in a patient with a GBM tumor who was tried on the oral targeted drug, Gilenevar. After 14 hours of the ingestion of the drug, the number of hot areas had substantially decreased. Seven days later the progress was even more significant. Similarly, PET used early in treatment can identify when treatment is not working by showing the cancer is not changing. Early monitoring enables the oncologist to change treatment strategies, thus saving valuable time. In a study with sarcoma patients, PET/CT scans have been effective in identifying a positive or negative response after the first treatment!

Conclusions
• PET/CT imaging utilizes the relationship between tumors and sugar consumptions—cancer cells eat a lot of more sugar than normal cells
• There is no evidence that eating less sugar prevents or modifies the course of cancer
• Browsing the web can be informative but also very misleading
• Only browse reliable sites such as the NCI
• PET/CT imaging helps to find out whether a cancer responds well to treatment; there is frequently no better way to find this out
• The best way to prevent cancer is to live a healthy life—there are plenty of avoidable risks!

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When you are dealing with cancer and the effects of cancer treatment, the last thing you need to worry about is if you can afford the services that we provide. Also, many insurance plans do not cover most of our services. We provide our services for you, for your friends, and for your family because individuals like you fund us with donations. Voluntary donations of any and every size are meaningful and necessary.

The past few years have been difficult for everyone, including our Center. We know that many of you are concerned about finances or are facing serious hardships. Donations to the Center are seriously down; these donations ensure that we can continue offering our high quality services for anyone who needs them.

Please make a donation to our Center. If you cannot make as substantial a gift as you would like, please give what you can. There may be people within your network who might be able to help support us. You could be an important conduit to company giving, foundations or even a collection of caring and compassionate individuals. We are asking you to look at people you know and ask them to contribute with you, or contribute on your behalf. The Simms/Mann Center is not endowed and we depend on your generosity.

**HOW WILL WE USE YOUR GIFT?**
You may designate your gift for general operational support, to help underwrite the costs of any of our programs: support groups, Insights Into Cancer, lectures, newsletter production and mailing, and/or Reflections.

**WHAT FORMS MAY MY GIFT TAKE?**
Gifts and pledges may come in the form of cash, checks, and securities. We also accept Visa, MasterCard and American Express as forms of payment. We gladly accept matching gifts from your place of employment. Gifts can be given in honor and in memory and we encourage people to do this. Estate planning is also essential to our existence. Please talk to us about incorporating us into your long term estate plans.

**PROCEDURE FOR MAKING A GIFT TO THE RESOURCE CENTER**
To make a gift to the Center, complete one of the gift envelopes available in the Center’s lobby or in Reflections, or send us a brief note stating the purpose of your gift, your name and address. You can pay by credit card or check payable to the JGCF Simms/Mann – Center. You will receive a letter to that person stating that a gift has been received. The amount of the gift will not be disclosed. Our website includes a list of the names of those who have made a donation of $25.00 or greater to our Center during the past fiscal year. The exact amount of the gifts is not publicized.

Please send your donation envelopes or letters to:
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200 UCLA Medical Plaza, Suite 502
Los Angeles, CA 90095-0934

If you have any questions or would like more information, please call us at 310-794-6644. Thank you for your support!
Understanding breast cancer requires understanding the normal anatomy of the breast. The breast is a milk-producing organ that sits on the muscle of the chest wall and is made of ducts, lobules and fatty tissues. Milk is made in the lobules and flows via the ducts to the nipple. The breast is controlled by estrogen, a hormone that circulates throughout the blood. Estrogen attaches to the estrogen receptors on breast cells and signals for the breast cell to grow and produce milk when a woman ovulates. If there is no pregnancy during that monthly cycle the growth pathway receives a signal to stop producing milk and the breast returns to its normal size. The next month the process starts again. In breast cancer, the normal pathway is subverted. A cluster of cells grows out of control, does not respond to normal signals and crowds out normal cells. This aberration can happen in response to estrogen or in response to other growth factors.

Pre-cancer and Invasive Cancer

Ductal carcinoma in situ (DCIS) is the earliest form of pre-cancer in the breast. In DCIS, the cells that become abnormal are still localized inside the breast duct and have not spread to other parts of the body. DCIS is often referred to as stage zero breast cancer. Lobular carcinoma in situ (LCIS) is when there are abnormal cells in the lobules, where the milk is made, and the cells have not invaded or spread to other parts of the breast.

Invasive breast cancer occurs when these abnormal cells leave the duct or lobule, multiply and invade the surrounding breast tissue. This type of cancer can also travel via the blood stream and lymph system, and set up in other organs, such as the lung, bone, brain or liver. These distant locations, once detected, are called metastases. In early stage breast cancer there are many treatments that are used to prevent metastases. There are also multiple therapies available to treat metastases, but to cure (ridding the body of all breast cancer cells) is no longer an option.

The treatments for breast cancer are surgery, radiation and systemic therapy which include hormonal therapy, chemotherapy and targeted/biologic therapies.

Surgical Options

In breast conserving surgeries only the malignant area is removed along with a margin of healthy tissue surrounding the tumor. This type of surgery is referred to as lumpectomy, wide excision, lumpectomy and partial mastectomy. In a mastectomy the entire breast is removed and is often followed by immediate or delayed reconstruction, although this is a personal choice. A mastectomy is performed if a tumor is large, multiple areas of the breast are affected, the location of the tumor makes it necessary, or if there is a genetic, or familial predisposition to developing breast cancer.

Genetic Predisposition

Although many people assume breast cancer is a hereditary condition, familial cancer accounts for only 5-10% of all breast cancer diagnoses. A substantial number of familial cases are related to mutations of the BRCA1/BRCA2 gene, which can be determined by doing a special type of blood test that looks at gene sequencing. If a mutation is present, a woman has a 50-85% chance of developing breast cancer by the age of 70. There is also a 40% chance of developing ovarian cancer. Many women consider having bilateral (both sides) mastectomies to remove their breast tissue and, thus, reduce the likelihood of developing breast cancer. Women also opt for removal of their ovaries (oophorectomy) for the same reason. These are personal choices that need to be discussed with a knowledgeable physician; individual circumstances as well as timing must be taken into consideration. These interventions might be initiated after a woman has had children and feels that her family is complete.

Lymph Nodes

Lymph nodes are organs of the immune system responsible for fighting foreign invaders within the body. When a person has a sore throat the lymph nodes in the neck get inflamed. The same thing happens in the breast, but with the breast area the lymph nodes in the armpit (axilla) get inflamed. When cancer cells migrate or travel outside the breast, the lymph nodes can trap the cancer cells. There is often a first lymph node that receives drainage from the tumor area and thus is most likely to be affected. In the past, the lymph nodes in the armpit were removed and examined for the presence of cancer cells which, if found, would indicate an increased potential for the disease to spread and have implications for additional treatment. Surgeons often took many lymph nodes from each patient which was a more invasive surgery for the woman. One of the problems with this surgery is that it then created a significant side effect, lymphedema, wherein lymph fluid can get trapped in the extremities such as the arm because the lymph node system and pathways are disrupted by the surgery. Approximately 90% of the time the axillary nodes will drain the breast. The other 10% of the time the drainage is into the subcutaneous and internal mammary area. About 10-15 years ago, a new procedure was implemented based on the idea that fewer lymph nodes could be removed if the first one or two could be identified that receives drainage from the breast tumor. These first lymph nodes are called "sentinel lymph nodes." The sentinel lymph node technique is done before and during the surgery. The area around the tumor is injected with a tracer blue dye or a small amount of radioactive isotope a short time prior to the surgery. In surgery a lymph node is identified with the highest amount of the radioactivity or the highest amount of blue dye. That node is then removed and sent to the pathologist. If no tumor is identified, there is a 95-96% chance that no other nodes are involved. This has become the standard procedure and represents a perfect example of how understanding physiology can be used to get the maximum amount of information with the fewest number of problems. This technique has revolutionized breast surgery.

Radiation Therapy

Radiation therapy significantly reduces the chances of the tumor returning to the breast or armpit (axillary) area. Radiation therapy is used after surgery to make sure that no loose cancer cells are left in the breast. It is always used after a lumpectomy and the radiation is directed to the entire breast. Sometimes an extra boost is given to the specific area where the tumor was surgically removed, which is called the "tumor bed." Sometimes radiation is used after a mastectomy; this depends on the status of the clear tissue around the surgical site. If the tumor is close to the chest wall for example, then this is often an indication for radiation after a mastectomy. When the lymph nodes are positive for breast cancer, the area around the lymph nodes have to be radiated after a mastectomy. Radiation is a way of controlling local disease, meaning disease in and around the breast/chest wall. It does not prevent recurrence in other parts of the body.

Medical Oncology

The role of a medical oncologist is to address the possibility of a recurrence. Recurrence means that the same tumor shows up in an organ other than the breast at some point in the future. After surgery, when there is no visible disease left in the breast, the goal is to prevent a systemic recurrence. Medical oncologists also deal with systemic recurrences that can happen at a later point in time. Many people wonder how breast cancer can develop in a different organ at some point down the line. It means that the cells travelled there when the original tumor was still in place and that the cells were dormant or did not become apparent until years later when they have grown into a tumor mass big enough to be found on scans or cause symptoms.

Adjuvant Systemic Therapy

The value of systemic therapy after surgery, when there is no visible disease left, is to try to eradicate the microscopic cells that could have escaped into the blood stream. Systemic therapy means that the entire body has to be treated. Systemic therapy is either oral or intravenous so that it is absorbed into the bloodstream. There are two types of systemic therapies: (1) targeted therapy, which is directed specifically at the pathways responsible for driving the growth of cancer cells; and (2) chemotherapy, which directed at rapidly dividing cells but affects healthy cells as well as tumor cells.

Not everyone gets adjuvant systemic therapy. Patients who have more lymph node involvement, larger tumors, and higher staging all have a greater possibility of recurrence. Most of the time chemotherapy is used in individuals with large tumors or...
who have lymph node involvement.

In recent years there have been two tests developed to help select which patients are more likely to benefit from chemother-apy. Both are FDA approved and useful in identifying women with hormone sensitive breast cancer, which means that the tumors have hormone receptors for estrogen and/or progesterone on the surface of the cell. One test is called Onco- type DX, which is a Mamman- map® test. Both of these tests provide more detailed genetic information and are used to predict, based on a molecular profile, if the tumor is likely to recur. The Oncotype DX® is based on an analysis of 21 genes and assumes that the pa-tients will receive hormonal therapy. Patients are sorted based on the molecular profile of the tumor, and a prediction is made about the probability of the tumor recurring over the next 10 years. Once the genetic analysis of the patient’s tumor is performed, the test estimates a recurrence risk. There are different categories that assigns them into a low, intermediate, or high risk recurrence category. Mamman- map® is a test that is based on an analysis of 70 genes; this test, however, must be decided on at the time of surgery, as it requires fresh tissue samples, not ones that have already been processed by the pathologist. It is more sensitive and classifies patients more accurately into the high and low risk or recurrence groups over the next 10 years. This test has not been as widely used because of the timing needed for the sampling of tissue. Both of these tests are gaining in use, but both are good examples of how cancer treatment is become more individualized, and both highlight the importance of understanding the biological characteristics of the tumor.

We now know that breast cancer is not a homogeneous disease, and can no lon-ger be treated with a one size fits all ap-proach. There are different categories of breast cancer, each requiring a tailored treatment. Breast cells that develop into cancer use different pathways, and by identifying the pathway scientists can target therapeutic interventions at the specific factors that drive the pathways.

Cancers with Hormone Receptors
Cancers that have estrogen/progesterone receptors on the cells are fueled by estrogen in the body, which helps them to grow out of control. Estrogen is pro-duced in great amounts in the ovaries in pre-menopausal women. However, it is still produced in smaller amounts in post-menopausal women in bone, liver and muscle tissues and this small amount is still enough to stimulate breast cancer growth. The hormone receptors on the outside of the cell allow the hormones to bind to the cell, which then tells the cell to grow. Tamoxifen, a hormone used to treat for a particular kind of estrogen but prevents estrogen from binding to the cell by blocking the receptor. Estrogen is still present in the blood but its effect is blocked by the tamoxifen. The strategy for tamoxifen was developed 20 years ago. It works in both pre- and post-menopausal women and reduces the risk of recurrence of breast cancer by about 50%. In fact, it works similarly to Arimidex® (anastrozole) and Femara® (letrozole). There is a third that is slightly different but accomplishes the same task called Aromasin® ( exemestane). All three inhibit aromatase, block estro- gen production, and decrease estrogen levels. Several large multicenter, multi-country trials compared tamoxifen to aromatase inhibitors as adjuvant therapy in post-menopausal women. Every study reported an improvement in relapse free survival in the range of 20-40% on top of the benefit acquired with tamoxifen. This is why tamoxifen is so popular. In pre-menopausal women, the ovaries do not use aromatase to make estrogen although they do have the aromatase enzyme but it accounts for only 10% of estrogen production. Blocking aromatase would not change estrogen levels or alter risk of recurrence in premenopausal women.

For pre-menopausal women, estrogen can also be blocked by a monthly injec-tion to temporarily shut down the ova ries; women who are finished with child bearing can opt to remove their ovaries. An aromatase inhibitor can be used to fully shut down estrogen production in other organs after these procedures. We do not know if this strategy is better than tamoxifen alone. For now tamoxifen is the standard of care in premenopausal women.

The common side effects for anti-estrogen therapies are the same as the symptoms of menopause: hot flushes, irritability/de- pression, and vaginal dryness. Tamoxifen has some additional side effects in the five years of recommended treatment: stroke, blood clots, and uterine cancers, which are easily detected in the early stages because they cause bleeding. Aromatase inhibitors increase the risk of osteoporosis and bone fractures. Women on aromatase inhibitors need to be aware of the potential for bone loss, should have bone density scans, and may need to be on bone strengthening medications while taking this treatment. Bisphosphonates such as fosamox® (oral weekly), Boniva® (oral monthly), and Zometa® (intravenous) can be used to interfere or prevent bone damage. They interfere with the formation of osteo- clasts which break down old bone and form a barrier between the bone and cancer cells, so it is only used in post while on aromatase inhibitors. A recent Austrian study published in February in the New England Journal of Medicine reported that Zometa®, when added to hormone therapy in women with metastatic breast cancer, patients, caused a reduction in breast cancer recurrence. This is exciting, but clinicians are wait ing for confirmatory trials. There is no information on women who received chemotheraphy.

We are still not completely sure how long to keep women on hormonal therapy. Most women are put on anti-estrogen therapy for five years. A very large North American study (M17) evaluated women after 5 years or on the drugs that work similarly to Arimidex® (anastrozole) and Femara® (letrozole) after 5 years. The risk of late relapse was re-duced by 40% and the trial was so posi tive that it was stopped after 2.5 years. Women taking the placebo were offered active therapy. Even women with a 2.5 year break in therapy had a 40% reduc tion in further risk of late relapses.

HER 2 Pathway
The HER-2 pathway is another impor tant mechanism by which breast cancer progresses. Her-2 is a growth factor that drives the cells to proliferate but it is not under estrogen control. This pathway may also be important in the develop ment of the breast. Normal breast cells have HER-2 protein (receptor) on their surfaces but some women have too many receptors on their cells. Having too many receptors on the cell causes out of control growth of cancer cells as well as the formation of aggressive tumors. The fundamental alteration that causes HER-2 positive tumors is gene amplifica tion which results in high levels of protein production. The abnormality in this path way was discovered by Dennis Slamon, MD, at UCLA in the late 80s. His lab also discovered that the HER-2 pathway was altered in 25% of the patients and that those patients had both aggressive disease and decreased survival. Dr. Slam on and his colleagues developed a bio logic substance Herceptin® that targeted the HER-2 receptor and prevented breast cancer cell growth. It is a ‘monom’ wonder...”

...We can think of HER-2 receptor as an old fashioned TV antenna that sits on top of the house. The antenna would receive the signal from the outside...follows the signal to the inside, and thus makes the TV receive the signal. In the case of HER-2 receptor, the receptor sits on the surface of the cell like an antenna, and receives growth signals from the outside, transmits it to the cell, and tells the cell to grow. HER-2 is a protein, Herceptin® is an antibody against that protein, that acts like a blanket that covers the antenna and stops it from receiving the correct signals from the outside and stops the signaling process and growth...” Hercep tin® is not chemotheraphy and does not cause hair loss, it can weaken the heart muscle, but this can also be caused by chemotherapy such as Adriamycin.

This treatment was the first therapy that specifically targeted a directly responsible for metastatic breast cancer. The recurrence rate in women with early breast cancer that received that agent, dropped by 50% compared to the women that did not get it. The effective for therapy was good and Herceptin® countered the aggressiveness of the tumors, essentially making the recurrence risk similar to HER-2 negative tumors. The degree of benefit in early breast cancer has been considered the largest since the introduction of tamoxifen in hormone positive disease.

Within the last year another agent was approved by the FDA for patients with HER-2 positive disease. Lapatinib (Tyker b®) is used together with chemothera py in women that are no longer respond ing to Herceptin®. It is only approved for patients with metastatic disease. It is a small molecule that attaches to the HER-2 protein on the inside of a cell and then blocks the downstream cascade of events in the HER-2 pathway.

Triple Negative Breast Cancer
Some breast cancers have no hormone receptors and are not HER-2 positive. These tumors are referred to as triple negative breast cancers. They tend to be more aggressive tumors, and have a high frequency of relapse, that is they are divi sing rapidly. Triple negative tumors are the most sensitive to chemotherapy because chemotherapy acts on rapidly dividing cells. There are several different chemo therapies used with these tumors. Wom en with triple negative disease do not get hormone therapies (tamoxifen or the aromatase inhibitors) and do not get treated with Herceptin®. While these tumors tend to be more aggressive, when they respond to chemotherapy the response is often enduring. If the tumor does not come back in a short time, it often does not come back at all.

Other Targeted Treatments Approved
Tumors require blood vessels for growth. Tumors secrete a special protein called VEGF (vascular epithelial growth factor) that stimulate blood vessel growth. Blood vessels deliver nutrients to the tumor and serve as highways through which tumor cells can travel. Scientists have developed that blocks the vascular growth factor thus interrupting the development of new blood vessels and starving the tumor of nutrients. Bevac zuamb (Avastin®) targets this pathway. In several large studies the addition of beva zuamb (Avastin®) to chemotherapy regimens significantly increased the response and progression free survival in breast cancer. This drug also has been found to normalize the blood vessel growth which otherwise tends to be very erratic, and may actually increase the effectiveness of chemotherapy to the tumor.

Conclusion
The nature of medical oncology is chang ing quickly and oncologists are moving away from a “one size fits all” treatment plan. Cancer treatment is becoming more personalized as knowledge and under standing of the biology of the cancer is increasing. In the course of treatment in the pro cess, the side effect profiles are changing with the goal of minimizing harm by using targeted approaches.
Scientists are conducting a lot of research to determine how to treat prostate cancer with many new approaches being discovered for treatment of both localized and advanced disease. There was an increase in prostate cancer diagnoses during the 1990s due to the discovery and implementation of PSA testing; however, the number of cases has dropped off since then most probably because the testing caught so many previously undiagnosed cases. Screening with PSA has had important benefits. The clinical stage at time of diagnosis has also changed dramatically. Today approximately 50% of all diagnoses are found in the earliest stages; in the late 80s and early 90s only 16% of cases found were early cases. Similarly, individuals with lower PSA values are getting diagnosed and the number of high risk cancers has also been decreasing from 36.6% to 16% in the early 2000s. Given the current state of diagnosis and research, eight men will be diagnosed with prostate cancer for every one who dies of it. This is substantially better than for lung cancer in which 1.3 patients are diagnosed for every 1 who dies of it, or for colon cancer which is 2.1 diagnosed for every 1 who dies of it.

A New Approach: Focal Therapy

The burden of treatment is significant. Common side effects include erectile dysfunction, urinary incontinence, urinary urgency, rectal urgency, lost time from work and, on occasion, more rare complications. Researchers are working to develop treatments that reduce these side effects. One area of research is on focal therapies which only treat the affected part of the prostate, thus potentially reducing side effects. This focus addresses our concern that low risk disease not be “over treated” and it may create less anxiety than “active surveillance” but fewer side effects than complete treatment. Focal therapy is usually done with one of two methods. High Intensity Focused Ultrasound, HIFU, is a procedure by which high intensity ultrasound is delivered to a specific area. The HIFU heats the area to a point that the cells in the focal area are killed. In cryoablation, liquid nitrogen-cooled probes are inserted through the perineum into the prostate to freeze the cells, killing the cancer cells. Both therapies can be used to treat a very specific area or a larger section of the prostate and are done under general anesthesia.

Focal therapy may be ideal in circumstances where the prostate cancer has a low relative volume and the disease is low grade and defined as low risk. It may also be ideal for patients who have one lesion that can be easily identified. However, there are some caveats. A review of several studies showed that two-thirds of all men with prostate cancer have multifocal disease and there are difficulties in determining which men have just one lesion. Only lesions that show up on the MRI would get treated, but what about the smaller ones that do not show up on MRI? Usually men who undergo this procedure have what is called an “extended biopsy” first. This means rather than the usual 12 sampling core biopsies, there may be 60 samplings in order to develop a template to guide focused therapy to the exact location of the tumor. There are other important questions to consider and there is considerable debate about this as well. Some argue that the “invasion index,” the one that is identified, is often the culprit responsible for mortality and treating it is all that is needed. But then other questions arise, e.g., how do you define success with this procedure? What happens to PSA? When do you re-biopsy? The positive biopsy rate after cryoadsorption is 8-25%. There is still very little data to support these procedures, especially HIFU at this time. One study with six years of follow-up showed a 10% risk of rebiopsy after 6 follow-up. There are no comparisons, but there was no comparison group.

Focal therapy is still a work in progress. It has a lot of potential but there is still a lot to learn. The hope is that it could be like a “lumpectomy” in breast cancer, for use in men who have low risk (low Gleason score) tumors. In order for this to be successful, better imaging techniques are needed that will detect the entire tumor in the prostate. Further, the approach to treatment needs to be standardized and we need to define when the treatment is considered a failure and what should follow. We need systematic data to answer these questions, which will only come with additional scientific and sound research. As a result, these procedures should only be done in the context of a research trial so that data can be collected and men and their doctors can better appraise whether this procedure is the best option in the years to come.

New Treatment Paradigm: Active Surveillance

For men who have low risk disease, there is some question as to whether they should be treated and endure the side effects that come with full treatment. The idea is to match the treatment approach to the aggressiveness of the disease. Active surveillance is not simply “watchful waiting.” Active surveillance means close follow-up, re-biopsy and re-evaluation as a systematic and ongoing process. Entry criteria for active surveillance usually include a Gleason score of 6 or less and there is a 10% risk of re-biopsy after 6 follow-up. For men who have low risk (low Gleason score) tumors. In order for this to be successful, better imaging techniques are needed that will detect the entire tumor in the prostate. Further, the approach to treatment needs to be standardized and we need to define when the treatment is considered a failure and what should follow. We need systematic data to answer these questions, which will only come with additional scientific and sound research. As a result, these procedures should only be done in the context of a research trial so that data can be collected and men and their doctors can better appraise whether this procedure is the best option in the years to come.
several important concerns related to active surveillance. Men are concerned that their cancer is understaged and that the surveillance biopsies are not accurate. In addition, many men report increased anxiety related to the surveillance process.

One of the difficulties with conventional biopsy procedures is the difficulty in tracking the actual tumor so that repeat biopsies can be done in the same place. Two-dimensional ultrasound is used and, as such, there is no ability to find the site for repeat imaging. In May, 2008 the FDA approved a new type of machine that will remedy this problem, the Artemis System. This machine integrates the MRI and ultrasound to create a three-dimensional image, allowing biopsies of the same area to be performed over more years and to track the same tumor. This tool, which UCLA has, will allow for re-biopsy accuracy, will enhance “active surveillance,” and may help to reduce some of the anxieties for men with prostate cancer. Research efforts in imaging techniques that can be used in real time to guide biopsies will be a very important strategy for the treatment of prostate cancer. In time it could be helpful to be able to use MRI with an endorectal coil, PET scan data, or MRI spectroscopy. The synergistic use of these tools will increase biopsy accuracy and allow for accurate scanning, planning and biopsy. UCLA’s active surveillance program is run by Leonard Marks MD, 310-794-3566.

Surgical Treatment
There are important goals for surgical treatments of prostate cancer. The first is to remove the cancer with no recurrence. Maintaining good sexual function, urinary control and low stricture rates are also important. Minimizing post surgical complications, such as pain and transfusions, as well as allowing for a quick return to work are all goals. Life style changes are also important. Good cosmetic outcomes should also be considered.

One of the newer strategies in surgical treatments is robotically-assisted laparoscopic prostatectomies, in which a twisted instrument mimics the human hand within a three-dimensional visual environment. The advantages of using the robot versus laparoscopic-only is that it uses consistent movement and frees the surgeon from fatigue and tremor while operating. The robot assisted laparoscopic that is currently in use is the DaVinci robot.

Many individuals think that because something is done laparoscopically that it must be better, but the research has not yet confirmed this claim. For example, the number one goal of any treatment should be removal of the cancer and remaining cancer is understaged. A study published in the Journal of Clinical Oncology, there was almost a 400% higher chance of the need for “secondary therapies” (radiation, hormones) after a robotic surgery. The urethral structure rates in this same study were 40% higher after robotic surgery. This was a large-scale study based on all Medicare claims from all across the country. There appears to be some difficulty with getting clear margins using the robotic technique and this is a number one goal. Preservation of sexual function is also a concern as well. The data do not support this. In a study of 600 patients, the patients who had an open surgery looked the same or slightly better than those who were done the robotic surgery. Having studied reported in the Journal of Clinical Oncology there were no differences found regarding patient pain scores or narcotic use after surgery, transfusion rates (which tend to be low in either surgery), continence issues and return to work. This data brings into question the advantages of the laparoscopic robotic surgery. There were also differences regarding patient satisfaction and regret. Of the 6 15 men who were surveyed who had open and robotic surgery at Duke University, satisfaction rates were 4 times higher. Regret rates were 3 times lower after open surgery compared with men who had robotic surgery. It is believed that men’s high expectations about the benefits of robotic surgery lead to disappointment when they realize that this technique is not matched by what they expect. Rather, the number of secondary therapies may influence this sense of regret. The key is to provide men with realistic expectations about any procedure. Robotic surgery does not appear to be the panacea that everyone hoped that it might be. It may be particularly important to focus on the surgeon and the surgical team as key to good outcomes. The volume of surgery done by the surgeon in any technique is crucial. The bottom line recommendation is to find someone who is doing these surgeries regularly and has done many.

New Treatments for Advanced Disease
There is a new promising treatment for advanced disease called Provence. This treatment is being developed by the University of Louisville and uses the body’s immune cells to attack cancer cells that have spread to other sites. It is currently indicated for men with “androgen independent” metastatic prostate cancer who have minimal symptoms. In 2007 the FDA requested “more information” prior to approval which led to a large patient outcry and congressional inquiry of the delay. After a positive randomized trial, it is expected that the FDA’s approval will be sought soon. The data suggest a median survival advantage of 4 months which is an improvement. The 2 month advantage offered by chemotherapy. Keep in mind that these are median survival and there are many individual differences. At 3 years 33% of the men who were treated with Provence lived compared with 20% of the men who received a placebo. A question that needs to be addressed is what would happen if this was used earlier in the disease process. Provence is created by using special immune cells which are removed from the patient’s own blood. These cells are shipped to a lab and exposed to special molecularly and cells that are found on prostate cancer cells. They are then re-infused back into the patient where they attack prostate cancer cells. The side effects are minimal compared to the use of chemotherapies. The most common side effects are chills (54%), fever (30%), headache (16%) and flu-like symptoms (9%).

Prostate Cancer Prevention
Prostate cancer is the second most common cause of cancer related death in men. Almost three-fourths of all men have prostate cancer on autopsy at age 80 although most of these men do not die from their disease. The New England Journal of Medicine recently reported a study of finasteride, a drug which has been used to treat enlarged prostates. After following men who had been on the treatment for seven years, it was found that there was a 25% reduction in the chance of developing prostate cancer, and that those who had higher levels had a higher risk. The drug has a generic form available so it is not too costly, and only 2% of men reported a reduction in sex drive. It also had a positive side effect of increasing hair growth on men’s heads. It is believed that because it reduces the size of the prostate it enhances the ability to do a more accurate biopsy.

Two large studies have suggested that exercise reduces the risk for aggressive prostate cancer however there were no observed differences in total incidence of prostate cancer based on exercise. With regard to diet, a healthy heart diet appears to be good for the prostate. Eating a low fat, high fiber diet that is rich in fruits, vegetables and soy is considered healthful. In addition, eating foods that are rich in omega 3 fatty acids also appears to be helpful. Pomegranate juice may be beneficial as it is a rich source of polyphenol flavonoids which are known antioxidants, Pomegranates have been shown in the laboratory to inhibit the growth of prostate cancer cell lines and reduce the Densities of implanted tumors in mice. One small study here at UCLA showed that men with recurrent prostate cancer who had a rising PSA after surgery or radiation and were low risk (had PSA 5-10 and Gleason scores less than or equal to 8) had some positive benefits from consuming 8 ounces of pomegranate juice daily. Of the 48 patients who were enrolled, 10 of 48 or 21% progressed by PSA. Thirty-one per cent achieved decreased PSA (range 5%- 85%) and 42.5% had an improved PSA doubling time.

Being overweight is not a good health status for prevention of prostate cancer. In one study, serum was obtained from overweight men before and after an 11 year period in which they consumed a low fat/high fiber diet where only 10% of calories were obtained from fat and they exercised 20 minutes each day for five days per week. In the lab they grew prostate cancer cells in the serum obtained both pre- and post- diet exercise intervention. The prostate cancer cell growth was reduced by 30% after the intervention and the serum testosterone was also lower after the intervention. Keep in mind that this is a laboratory study. In a study with 93 men who were randomized to a diet and exercise versus usual care program there were some interesting findings. PSA decreased 4% in the experimental group and increased 6% in the control group. Serum from the experimental group decreased prostate cancer cell line growth by 70% in the laboratory. In this study only 10% of the men’s daily calories came from fat and they had one daily serving of fruits plus 58 grams of a fortified soy protein powdered beverage. They consumed 3g of fish oil, vitamin E (400 IU daily) selenium (200 mcg daily) and vitamin C (9 g daily). They also walked for 30 minutes/day a week as a moderate aerobic exercise and participated in stress management techniques such as yoga based breathing, meditation, imagery and progressive relaxation for a total of 60 minutes daily. Diet and exercise are not considered treatments for prostate cancer, but may have positive benefits for prevention.

Patients frequently wonder about using supplements. Our best advice is that anyone who wishes to use supplements should consult someone knowledgeable about the literature. A recent article in the Journal of Urology and it was noted that there was a supplement on the market (PS-SPEES) that lowered PSA but was tainted with estrogen and increased the risk of stroke. A scientific study in which 200 mcg of selenium and 400 mg of Vitamin E were taken, called the SELECT trial, was stopped as results indicated the use of the supplements was not safe. Saw Palmetto and Pygeum are not indicated for prostate cancer prevention. They may be helpful in benign cancer disease to assist men with difficulty urinating, but they should not be used in relation to prostate cancer. Caution is important when selecting supplements.

Conclusions
The unique experience of the surgeon is a more important criterion than the surgical approach to prostate cancer. Focal therapies are promising, but not ready for prime time. Active surveillance deserves a close look by men with low-risk disease, but requires vigilant surveillance. The horizon is getting brighter for men with advanced disease. Diet and exercise may be important in preventing and treating common men’s health problems. Whole foods can be great sources of commonly purchased supplements and may have additional benefits. The benefits of herbal medicines vary widely and patients need to be aware there is a wide variation in the quality of ingredients and manufacturing processes. A combination approach based on knowledgeable interventions is most effective in treating the whole patient.

Simms-Manns – UCLA Center for Integrative Oncology News, Spring 2010 11
"The intuitive mind is a sacred gift, the rational mind a faithful servant, we have created a society that honors the servant and has forgotten the gift." - Albert Einstein

INTRODUCTION TO MINDFULNESS FOR PATIENTS WITH CANCER AND THEIR CAREGIVERS

SUSAN SMALEY, PhD, PROFESSOR IN PSYCHIATRY AND BIDBEHAVIORAL SCIENCES AND DIRECTOR AND FOUNDER OF THE MINDFUL AWARENESS RESEARCH CENTER (MARC) AT THE JANE AND TERRY SEMEL INSTITUTE FOR NEUROSCIENCE AND HUMAN BEHAVIOR, DAVID GEFFEN SCHOOL OF MEDICINE AT UCLA

This is a summary of a lecture that was presented on October 14, 2009.

Mindfulness, or mindful awareness as it is sometimes called, has been defined for over 3,000 years as the practice of the moment-to-moment attention to present experience with a stance of open curiosity. Imagine a child picking up a leaf from the ground and examining it. This is an example of being focused and fully present to a momentary experience. It is the antithesis of being overwhelmed, worried about what to do or how to accomplish things.

Research on mindfulness as a practice is quite limited but growing. In a Pubmed search (PubMed is a search engine used to find published research studies) only 286 research articles were found when mindfulness meditation was used as the search command while 1,538 articles were found when meditation was used. In contrast, and to put this in perspective, when heart disease and exercise were used as the search command 43,448 articles were found. This exercise illustrates how little scientific research currently exists about mindfulness and mindful awareness.

Mindfulness is a very personal experience and the best way to understand it is to begin to practice it. We live in a culture in which information is constantly coming at us and, as a result, most people feel there is too much to do, too little time, too much information and often too many choices. As a result there are increasing amounts of day-to-day stress that people experience, even before facing a challenging illness such as cancer. Wellness might be best reflected when we have a balance between “doing” and “being.” “Doing” is the process of producing, thinking and reasoning and “being” is experiencing, intuitive awareness and mindfulness. Many times when we are out walking in nature we are much more likely to be in a state of being. We observe, experience the smells, sounds, beauty around us and we do not feel compelled to accomplish something.

The science of mindfulness has begun to look at both the “traits” of mindfulness that someone might possess more innately as well as the “state” that allows us to learn the practice of mindfulness. For example, someone who might be more mindful as a trait might be someone who is very present and attuned to others versus someone who is distracted and absent minded. Scientists have developed questionnaires to assess the presence of mindfulness as a trait. Someone who is mindful is likely to have the following qualities and to endorse items such as these which symbolize the types of questions on these surveys:

- **Observe**
  - Watch my feelings without getting lost in them
  - Notice the smells and aromas of things

- **Acting in Awareness**
  - I pay attention to sounds such as clocks ticking, birds chirping, or cars passing

- **Describing**
  - I can usually describe how I feel in the moment with considerable detail

- **Acting Without Judgment**
  - I make judgments about whether my thought are good or bad (this item is scored in reverse on the questionnaires)

In 2007 a study was published that assessed individuals regarding their mindfulness using one of these questionnaires. They divided the participants into those that scored high on mindfulness and those that scored low. They then did a special type of brain scan while having them look at a picture and asking them to label the feeling that was depicted in the picture. They did this to see what portions of the
brain were activated during this "affect labeling task" and found that higher scores on mindfulness scales were associated with greater prefrontal cortical activation. The areas of the brain that were activated are known to help quiet the brain when under stress. The amygdala in the brain, in contrast, triggers the flight or fight response which increases cortisol (a hormone to facilitate responding to stress) which increases arousal and produces immune changes. A fear response is appropriate and adaptive. It has had evolutionary benefit helping people to survive as it facilitates knowing what to fight or when to flee a situation. As humans we have evolved to have the capacity to experience the fight/flight response (stress) when no threat is really present in part because we have the ability to imagine a threat. When our brains create a threat we develop the stress response. However, when this stress response is activated over the long term due to chronic stressors such as time pressures, feeling overwhelmed by activities and such it is not useful or healthy. The prefrontal cortex of the brain helps to quiet the amygdala.

This research has raised the question, "What happens if you teach people mindfulness?" The research has studied both long time meditators (of many different forms of meditation) as well as those who do shorter-term practice. The research suggests that in both groups there is a greater sense of well-being, less anxiety, less stress, and less depression. It may also have a protective effect as it was evidenced in people who were studied after having recovered from a depressive episode. Individuals recovering from depression who were also taught to meditate were 2 times less likely to relapse into a clinical depression.

Mindfulness also appears to have an impact on attention. There are three types of attention: 1) Alertness which maintains ready to focus, 2) Orienting Attention which means knowing where to focus attention and 3) Conflict Attention which involves keeping focused in the face of conflicting stimuli. Four studies looking at attention showed that even with a short course of mindfulness, people are able to improve their conflict attention. There have also been changes in the physiology of the body noted as a result of meditative experiences (mindfulness, yoga, meditation, Tai Chi) including reduction in blood pressure, quicker healing related to psoriasis, stronger flu resistance, improved immune response to a vaccine, reduction in chronic pain, improvements in sleep and a boost in energy.

Brain activity and brain changes are also now being studied. Research has looked at brain activity as measured on the surface of the skull (through EEG) finding different brain patterns in monks who meditate. In one study meditators were found to have thicker areas of the brain particularly in the frontal portion and insular cortex. There are indications that these areas help to regulate neurotransmitters and integrate sensory information coming into the brain.

A common question is arises whether any of this has any relationship to cancer and the answers are not known yet. However, because of the positive biological responses and improvements in well-being generated by meditation it is likely it can be helpful to patients and caregivers undergoing stress and there are no negative side effects noted. Studies have shown that 94% of all patients diagnosed with cancer experience psychological symptoms such as emotional distress as well as fatigue (79%), anxiety (77%), depression (56%) and sleep disturbance (55%). Many have immune imbalances which increases in cortisol and changes in cytokines likely due to stress. These are exactly the factors that mindfulness appears to affect in the general population, thus making the inference of appropriateness for individuals with cancer.

One study looked at genes that were turned on and off in a group of patients with prostate cancer and found that the mindfulness practice group had a different pattern of genes being expressed than those without mindfulness, and some of the genes were ones specifically involved in limiting tumor growth. These data are not definitive nor do they indicate that mindfulness will alter the course of cancer, but they are encouraging and suggest potential benefits. Similarly, there were positive effects in a study with 75 women with breast cancer who had early stage disease and were treated with radiation and surgery. After only an 8-week training program in mindfulness (2.5 hours a week plus one full day of training) the women who received the training showed enhanced quality of life, coping and immune function compared to a group of women who were on a wait list control. Mindfulness appears to be a helpful tool in coping with cancer for women with breast cancer and has positive effects on coping style. In addition, a recent study looking at yoga among patients with cancer found similar results on variables such as well-being, peace of mind, and mental health.

There are many different ways to practice mindfulness. Some techniques focus on breath because it is such an automatic process; thus, it requires a focused attention and practice to be able to maintain the focus in the face of other distraction. Mindfulness can be achieved through other types of attention including focusing on bodily sensations, sound, and eating. A common mindfulness practice is to eat a raisin or a grape and to really tune all sensory receptors to the sensation of it in your mouth along with the flavors and changes. Mindfulness does not have to be done in a special sitting position or even require stillness. Movement may be a way to create mindfulness with walking, yoga, tai chi or other movement that requires focus and attention. Even answering the cell phone can be done in a mindful way. For example, on the first ring, notice the phone is ringing and that you will answer it, then on the second ring tell yourself that you will give the person who is calling your undivided and full attention for the duration of the call, on the third ring, pick up the phone and be conscious of listening and attending to the other without allowing your mind to focus on other things. Mindfulness can be used towards feelings, thoughts, pain and listening. There are different methods of teaching it and it is important for individuals to find something that feels intuitively right. Filing more than one teacher may be an important process to discover the best approach for an individual.

Dr. Arnold Beiser, author of Flying without Wings (1989) became quadriplegic at a young age just after medical school and was in an iron lung due to polio. He later went on to become a psychiatrist. In writing about his world view, which had been shaped by his many life experiences, he asked the question, "Is it possible to be ill and 'healthy' at the same time?" This is a very important question for individuals who are managing a cancer diagnosis and all that goes along with it. His answer is particularly interesting. He stated, "It is perfectly possible for a person to have a sense of well-being and a serious illness at the same time... When a person sees those aspects of the world that are affirmative, those things he can do that are of value, he experiences a state of health. When on the other hand he views the world from the standpoint of what he cannot do, he is disabled regardless of his physical disability." Mindfulness may be an important tool in helping people to make these sorts of choices.

Mindfulness creates a greater capacity for 'choice' of how and where we place our attention which may make our responses to challenges to three important components. These components of relationship are defined as:

- self to self — a self directedness and is defined as knowing who you are and accepting weaknesses and strengths, having a purpose, an ethical code and living according to it
- self to others — cooperativeness, helping and empathy for others
- self to the universe at large — self-transcendence is seeing the world from other's perspectives and experiencing the self as part of a larger whole

These three factors contribute to authentic happiness and well-being and mindfulness appears to be related especially to "self to self" and "self to universe." Mindfulness is a tool that can help an individual relate to themselves and to others. Mindfulness can help you to understand some of the deeper issues that may affect you and the reactive patterns that may exist that influence relationships as well as understand the connections to a larger universe. Mindfulness increases awareness of habits of the mind.

In ending, Henry David Thoreau provided some wisdom that relates to mindfulness. He said, "Direct your eyesight inward and you will find, a thousand regions in your mind, travel them and be expert in home-cosmography."

Come Drum with us to BEAT cancer!

DrumsForCures presents the rhythm-driven cancer health festival, drumSTRONG L.A., a 24-hour, non-stop Drum Circle Sponsored by REMO & Village Music Circles

Join celebrity guest artists sharing their rhythmic talents raising awareness and funds to support cancer education and sun worship.

Grants of drum will be provided, or bring your own. Family & friends welcomed.

May 15, 2010 :: 1:30 pm - 3:30 pm
REMO Recreational Music Center
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BENEFITING SIMMS/MANN CENTER FOR INTEGRATIVE ONCOLOGY

Show your support. Sign up now! Download the easy to use donation form at www.drumstrong.org or www.simmsmancenter.ucla.edu
individuals who have a poor appetite or who are losing weight, stimulants may not be appropriate because they can further reduce appetite. They also can exacerbate anxiety, agitation, irritability and insomnia. The advantage of stimulants is that they have a quick onset and can be very effective. The most common types used are methylphenidate (brand: Ritalin) and dexamethasone. These drugs have been classically used for attention deficit disorders although there is a long history of their use for patients with cancer and HIV/AIDS. Their effectiveness is mainly documented through clinical experiences. In 2008 one study found no clear indication for improved quality of life in a small group of breast cancer patients who were also undergoing chemotherapy.

Modafinil (brand: Provigil) has also been used for patients who report significant fatigue and cognitive impairment. Originally approved for narcolepsy, modafinil acts on the central nervous system and is a non-amphetamine stimulant. It is less likely to disrupt sleep patterns and also promotes wakefulness and alertness. It has been used in multiple diseases associated with fatigue such as multiple sclerosis, ALS, and Parkinson’s disease. More research is needed, however, on the drug’s effectiveness in cancer patients.

Non Medication Interventions

Acknowledgment of concerns is helpful and both individual and group interventions may be effective for treating anxiety, depression, insomnia and other distress that can interfere with cognitive functioning as well as diminish quality of life. Counseling patients on managing daily activities, limiting distractions and organizing schedules can also be helpful. Development of memory aids such as using Post-its and lists to help organize activities and track progress on goals may reduce some of the searching that comes from memory loss. Maintaining regular places for common items such as keys, wallets and briefcase can help reduce those last minute stresses of trying to remember where those things were last left. It requires learning and creating a clear routine to put them in their assigned space each day. Adjustments may need to be made both at home and in the workplace. The American Disabilities Act (ADA) guarantees “reasonable accommodations” in the workplace. Where possible, open lines of communication between your physicians and human resources may be able to assist in creating a work environment that supports you. Small accommodations may have a large positive impact. Enlisting the support of friends and family by being open about what you are experiencing can sometimes facilitate help. It is also important to avoid self-recrimination. Cognitive behavioral therapy (CBT) is often helpful with this. It starts by acknowledging cognitive change without being self-critical. Try to avoid negative judgments and “self talk” that makes you feel worse about the changes. For example, when you forget where something is, saying to yourself, “I am so stupid” or “I have lost my mind,” is highly judgmental and negative. These negative thoughts are best replaced with kinder, more compassionate, and supportive thoughts about yourself such as, “Take a deep breath, I’m okay, I’ve just forgotten what I did with it, I’m struggling a bit today.”

For some individuals, the combination of cognitive strategies, improved sleep hygiene, and evaluation and treatment for overlying depression may be sufficient. For others it may be important to have a full neuropsychological consultation with cognitive rehabilitation as indicated.

Studies and Resources at UCLA

UCLA has two studies that are actively enrolling participants related to cognitive changes. The first is a cognitive rehabilitation study for breast cancer survivors. It is for patients after they have completed treatment within five years of the diagnosis of breast cancer. Participants must be between the ages of 21 and 75 and be willing and able to attend five weekly group sessions and participate in pre and post-evaluation (contact: Barbara Kahn at 310.9-25-220). There is another study for newly diagnosed patients, ages 21-65 years of age, in which patients enter prior to starting their endocrine therapy. It will comprehensively study the physical, emotional and cognitive outcomes in the year after a breast cancer diagnosis (contact: Amy Oppenheim 310-267-0958). UCLA offers the comprehensive survivorship consultants to evaluate potential causes of cognitive complaints and makes recommendations for further assessments. It is for survivors of all types of cancer and psychosocial assessment is included through the Simms/Mann Center. Information about this program can be found at www.vita.mednet.ucla.edu or call Erin Hahn at 310.825-9781. Supportive services as well as evaluation by a psychiatrist with specialization in cancer are also available through the Simms/Mann – UCLA Center for Integrative Oncology (contact: 310.794-6644).

The causes of cognitive complaints are multi-faceted with pre-existing changes in some individuals. Ruling out other causes such as depression and anxiety is important as these may be treatable. Some medications are helpful with concentration for some patients, but this needs appropriate work-up. Individual differences must also be considered. Cognitive and mood difficulties are common in patients undergoing or following treatment for cancer. Treatment of target symptoms is available and frequently helpful. Specific mechanisms still need to be clarified by researchers. Ongoing research will help to refine knowledge about what is at risk, what treatments are problematic and how to help those who develop ongoing cognitive complaints.

Many people find great value in being part of a group led by an experienced professional. Since each person has somewhat different needs, we offer a variety of groups. Some groups are like a class where others provide greater opportunity for self-expression, feedback and providing and receiving support.

The groups listed below are available without cost to patients and family members. Priority is given to UCLA patients. Enrollment requires an interview with the facilitator for more information about our groups or to enroll, please call (310) 794-6644.

FOR PATIENTS:

Ethical Wills

Ethical wills are an age old custom for preserving and passing on your values, beliefs, life lessons, hopes for the future, love, and forgiveness to your family and community.

Healing Through Art

A weekly art therapy group to explore the issues faced by individuals with cancer. No art skills required.

Living Beyond Limits

A weekly support group for women with recurrent or metastatic disease.

Look Good; Feel Better

A monthly group for women who have finished treatment and have no evidence of disease.

Prostate Cancer Group

A group for men dealing with prostate cancer.

Women Together

A weekly ongoing support group for women being treated for early stage breast cancer.

FOR PATIENTS AND THEIR FAMILY MEMBERS

Acupressure

A program that teaches helpful protocol and acupressure techniques for yourself and your loved ones.

Lung Cancer Group

A weekly support group for lung cancer patients and their caregivers.

Meditation: Guided Imagery for Inner Healing

A group designed to optimize emotional, physical and spiritual well-being through meditation & guided imagery.

Mindfulness Meditations

A weekly group to enhance wellbeing in the present moment.

QiGong

A weekly group practicing an ancient Chinese movement for restoring health and prolonging life.

FOR FAMILY MEMBERS & FRIENDS

Family and Friends

A group for friends and family members of individuals with cancer.

Husbands (Partners) of Women with Cancer

An evening group for men who live with women diagnosed with cancer.

INTEGRATIVE ONCOLOGY PROGRAM

The following fee-based group assessments are conducted by a physician. These programs help you maintain or restore health and wellness, improve quality of life and live as fully as possible.

Individual Integrative Medicine Assessment

Meet one-on-one to formulate a plan to maximize your overall health and wellness, based on an in-depth review of your current lifestyle. Topics covered include nutrition, exercise, herbs & supplements, and alternative medicine treatments. Cost is $350.

Small Group Workshops

These workshops focus on specific topics commonly faced by patient, such as the use of herbal medicine and/or nutritional supplements, strategies to manage menopause, during and after cancer treatment, and many more. Group enrollment is limited to 4-6 patients. Cost is $150 per person.

UCLA Cancer Survivor Education Day 2010

When: Saturday, May 8th 9:00am-1:00pm
Where: Ronald Reagan UCLA Medical Center Taubkin Auditorium, located on the B-Level
Admission: $50 at the door
Event Details: Come join us for our 4th annual event for cancer survivors and their loved ones to learn about the latest information and research on cancer survivorship issues.

Coffee, tea, juice and light snacks will be provided. Seating is very limited, so please register early for the event to reserve your place! Registration for the event is online at http://uclascnsurvivorday.eventbrite.com.
2009 SPEAKERS & TOPICS

SEE OUR LECTURES ON THE WEB
No matter where you are in the world you can see and listen to the leading professionals who participate in our monthly lecture series to help patients and their families live with and learn about cancer—providing up-to-date information, practical advice and answers.

To access our video archive,
- Select the Information Resource & Current Newsletter Link on the left hand side of the screen.
- Select Archives: Insights Into Cancer Videos & Article Summaries.
- From there, choose the lecture you wish to view and the type of video player you have on your computer. If you do not have a video player we have a link to you for downloading Windows Media Player or QuickTime.

Encourage your friends and family to logon each month and see our lecture. Of course, we hope you will join us because they get to ask your questions and we love seeing you there!

April 13, 2010
BREAST CANCER TREATMENT 2010: MEDICAL ONCOLOGY
- Sara Hurvitz, MD, UCLA Assistant Professor, medical oncologist, leader of the UCLA breast cancer clinical research program, discusses the current standards of care for breast cancer throughout the continuum-from diagnosis through treatment of early disease and management of metastatic cancer. Breast cancer in a disease that is best treated with systemic interventions that prevent the redevelopment of breast cancer after surgery and treat recurrence when it metastasizes to other organs. Traditional treatments such as chemotherapy and hormonal agents are described along with ground-breaking targeted biological agents that are being tested in clinical trials and emerging in the clinic.
Ronald Reagan Medical Center
757 Westwood Blvd
9130 Auditorium
7:30pm - Free Lecture

May 11, 2010
CONFESSIONS OF A CANCER HUSBAND: THE THINGS GUYS GET WRONG—AND WHAT THEY SHOULD DO INSTEAD — Marc Silver, author of Breast Cancer Husband: How to Help Your Wife (and Yourself) Through Diagnosis, Treatment and Beyond, talks openly about being a husband/partner to a woman diagnosed with cancer. The question: “What do men get wrong when the woman they love has cancer?” The answer: “A lot. We try to fix things. We do too much. We don’t do enough. We don’t know what to do about romance. We’re scared. In a word, we’re clueless.” Drawing from personal experiences, interviews with over 100 couples facing cancer and with cancer doctors and therapists, he presents some of the big mistakes men make when they are thrust into the unfamiliar role of caregiver. But this isn’t just for men only. Any cancer caregiver — wife, child, sibling, parent—can find comfort, inspiration and more than a few laughs. All are encouraged to attend.
June 15, 2010
MAKING THE TRANSITION FROM CANCER PATIENT TO CANCER SURVIVOR — Patricia Ganz, MD, UCLA Professor of Medicine and Health Services, medical oncologist, researcher. Director of the UCLA-LIVESTRONG™ Survivorship Center for Excellence, and Janet Pregler, MD, UCLA Professor of Clinical Medicine, internist, Director of the Iris Cantor-UCLA Women’s Health Center, describe what to expect when treatment ends and survivorship begins. They discuss short and long-term psychological and physical issues that can continue after cancer treatment, developing a treatment summary and care plan with your oncologist, plan for follow-up surveillance and cancer prevention, health promoting activities and the role of your primary care physician.

July 13, 2010
RECENT TREATMENT ADVANCES IN RADIATION ONCOLOGY — Perry Lee, MD, UCLA Assistant Professor, radiation oncologist and researcher, discusses radiation therapy as an integral component in the fight against cancer. Recent advances allow radiation oncologists to target cancer more precisely by conforming the radiation to the tumor’s size and shape, thus maximizing sparing normal tissue. He explains advances in 3-dimensional conformal therapy, intensity-modulated radiation therapy, stereotactic radiosurgery, and stereotactic body radiation therapy which result in improved tumor control rates, survival and decreases in short and longer term side effects.

August 10, 2010
COMPLEMENTARY MEDICINE IN CANCER: A PANEL OF EAST-WEST MANIPULATIVE THERAPIES AND HERBALISM — Mary Hardy, MD, Medical Director, Simms/Mann—UCLA Center for Integrative Oncology, moderates an expert panel on how complementary approaches can be utilized to improve quality of life, reduce symptoms and benefit wellness throughout the entire cancer care. Keith Henry, BS, DC, Assistant Professor of the Cleveland School of Chiropractic discusses the advantages and cautions of massage and manual therapies for cancer patients; Ku-Ki Hui, MD, FAAPC, Director, UCLA Center for East-West Medicine describes how acupuncture and herbs are used to treat symptoms of cancer and its treatments; and Amanda McQuade Crawford, RA MMIMI, author, medical herbalist with 20 years of experience shares knowledge about nutrition and herbs as complements to cancer care.

LUNG CANCER 2010: ADVANCES IN TREATMENT — Fairooz Kabbinavar, MD, UCLA Professor, medical oncologist and researcher discusses traditional and newer approaches to the treatment of lung cancer. Treatments using more targeted approaches currently used in clinical practice as well as research trials are presented along with novel approaches on the horizon.

October 12, 2010
STATE-OF-THE-ART APPROACHES TO THE TREATMENT OF ADVANCED PROSTATE CANCER — Matthew Rettig, MD, Associate Professor of Medicine and Urology and Medical Director of the Prostate Cancer Program of the Institute of Urologic Oncology at the David Geffen School of Medicine at UCLA, presents a historical overview and an update on the latest and most promising therapies for advanced prostate cancer. He presents the current treatment paradigms and a readily understandable summary of the molecular underpinnings of treatment resistance along with new greater understanding of the disease has led to the development of multiple promising new agents.

November 9, 2010
SKIN CHANGES AND CANCER TREATMENTS: TIPS FOR HEALTHY SKIN AND HAIR — Jonathan Celisca, MD, UCLA Assistant Clinical Professor, dermatologist, internist and researcher and Jenny Kim, MD, PhD, UCLA Associate Professor, dermatologist and researcher discuss how skin, the body’s largest immune system, hair and nails are affected by the trauma of traditional and newer targeted cancer treatments. General appearance can be altered and affects quality of life. Emphasis is placed on ways to improve skin changes during and after treatment with options available to help maintain healthy skin and hair. Tips for reducing side effects, recovery and looking your best are also presented.

December 14, 2010
UPDATE 2010: LYMPHOMA AND CHRONIC LYMPHOCYTIC LEUKEMIA — Lauren Porter-Brown, MD, UCLA Clinical Professor, medical oncologist and researcher discusses the range of lymphomas and chronic lymphocytic leukemia. Research is leading to better understanding of the many subtypes of lymphoma and how to differentiate them based on their genetic make-up. She discusses standard treatment strategies as well as novel approaches based on the most recent research, including topics such as chemotherapy, radiation therapy, monoclonal antibodies, stem cell (bone marrow) transplant, immunologic therapies and other targeted approaches.

Our lectures are free of charge, open to the public, first-come, first-served, Tuesday nights 7:00—9:00 p.m. For information, call (310) 794-6644. This year our lectures are held in the new Ronald Reagan UCLA Medical Center (BRMC) Auditorium, B Level, Room B130, 757 Westwood Plaza, Los Angeles, CA 90095; UCLA parking is $11; wheelchair accessible. Attendees can park in the medical plaza or there is valet parking at the front of BRMC.

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Reflections® is a not-for-profit organization committed to providing an array of affordable services and products. Proceeds from the sale of goods support Reflections’ daily operations and those of the Simms/Mann - UCLA Center for Integrative Oncology.

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