MAY 2013 VOL 16: NO 2

New Developments in Prostate Cancer Treatment



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Register Inside, Pg. 23

In this Issue...

ASCO-GU Conference Review Mark Scholz, MD

See the latest in prostate cancer imaging, treatment, and research

Self Care for PCa (Part 2) Dean Foster, MD

Learn how diet and nutrition help arrest the growth of prostate cancer

Focal Therapy for PCa Mitchell Kamrava, MD

New technologies in early treatment of prostate cancer are rapidly advancing

Fight PCa With Strength Training Joseph Horning, Strength Coach

Self-Care for Prostate Cancer (part 2)

Dean Foster, MD, PCRI Medical Director



Dean Foster, MD

The Internet has transformed the treatment of prostate cancer (PCa). Patient centered education at websites like the PCRI, NCI, ACS... is creating the well-informed patient. These patients and their families use empowering education to coordinate the fight against PCa effectively. Improving their lifestyle and care is improving their quality of life and survival through a process of daily "Self-Care".

Self-care unites an optimum healthy lifestyle, wise treatment decisions and a strong will to live. It lends to a longer and better quality of life, both physically and spiritually. It helps you inhibit prostate cancer growth on the cellular level.

Healthy self-care warrants a wise increase in proper diet and supplementation and a decrease in exposure to ineffective or harmful substances. Behavioral changes come gradually, so take it at your own pace. Fortunately, our research will help clarify what is beneficial to increase, what is ineffective and what needs to be avoided.

Self Care and Diet

Increase nutritional value of your diet while maintaining caloric restriction. Eating an optimum, nutritionally dense plant based diet while maintaining caloric restriction is a perfect arena for self-care. Dietary changes work best in the earlier stages of cancer initiation (the cell's initial conversion into cancer) and promotion (the growth of cells into a tumor). Although less effective, it can slow progression (recurrence, metastases) and decrease the side effects of advanced treatment.¹

However, even though a diet/supplement has a logical explanation of why it should inhibit cancer and is showing promise in cell and animal models, it still needs to be confirmed in well-run clinical trials before buying in. Caution is wise, irrespective of marketing claims. For example, a recent study on vitamin E shows no effect on low and intermediate risk PCa and a slight increase in high risk PCa.²

Drinking plenty of filtered water and fresh vegetable juices hydrates and fortifies intra and extracellular fluids with micronutrients whose benefits are just beginning to be understood.³ Minimizing free carbohydrates, animal protein, unhealthy fats, excessive weight gain and exposure to stress/toxins/infections/trauma makes a difference in longevity. Compliance can be difficult to achieve. Attend a support group if you need help; it is worth the effort. Here are some dietary suggestions:

Increase Allium Vegetables

The allium family includes garlic, onions, leeks, chives, shallots, etc. and is associated with a decreased risk of PCa. The beneficial reduction is more pronounced in the earlier stages of PCa, recalling our impression that improved diet and lifestyle have a greater effect on the earlier cancer stages of initiation and promotion.⁴

Increase Cruciferous Vegetables

Cruciferous vegetables like broccoli, cauliflower, kale, etc. have a high anti PCa tumor activity in cell culture, yet human epidemiological studies are inconclusive. However, some clinical studies do show a decreased risk of lethal PCa and metastatic disease when they are included in the diet. So, it should still be on the plate with lots of other green leafy and colorful fruits and veggies in a PCa fighting diet.⁵

Increase Flavonoids

Many vegetables and fruits have flavonoids, responsible for giving them color. Flavonoids are found in citrus fruits, tea, apples, blueberries, grapes, strawberries, cabbage, onions, tomatoes, etc. In a recent study, men with the highest total intake of flavonoids had a 25 % lower risk of aggressive prostate cancer than those men with the lowest flavonoid intake. The author sug-

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gests consuming a variety of plant-based foods in the diet, not one specific type of flavonoid or flavonoid-rich food.⁶

Increase Green Tea, not Black Tea

Tea, next to water, is the most widely consumed beverage in the world. The common black and green teas are from the same plant and both have flavonoids with antioxidant, anti-inflammatory and anti cancer activity. However, because of the fermentation process, black tea loses the polyphenols (EGCG, EC, EGC, ECG) thought to be major PCa fighting molecules in cell culture and animal studies. Perhaps this or other factors like adding creamer might explain why 7 or more cups of black tea per day increased the risk of PCa in a recent study of Scottish men. Studies of green tea fare better in reducing the risk of PCa in human studies. A Chinese study showed the reduction of PCa was significant and decreased proportionally to the amount of green tea consumed. Other studies have seen similar results consuming a few cups a day.

Increase Grains, Fiber

There is no consistently proven benefit of whole grains and fiber in fighting PCa. However, fiber is essential for proper GI function and lessens the risk of colorectal cancer in some studies. Some elements of fiber, like IP6 and modified citrus pectin, have shown modest PCa fighting ability. Of note, when compared to eating refined wheat products, rye bran significantly decreased PCa risk. Thus, natural grains and fiber from plants help fight PCa; sugary and processed grain products do not.

Increase Soy

There is a reduction of PCa risk with consumption of soy, an excellent complete protein replacement for animal protein. Soy's phytoestrogens don't appear to cause problems in males in moderate amounts. Unfortunately, the supplements genistein and daidzein, did not decrease PSA levels in men enrolled in active surveillance.

Increase Lycopene

The evidence that lycopene protects against PCa is mixed, as some studies show no effect, others a modest decrease of risk. There is good evidence that lycopene helps decrease advanced PCa if taken in adequate amounts.¹² Lycopene is found in tomatoes, watermelon, pink grapefruit, etc., protection is highest with tomato sauces/products, cooked with a little oil and served a few times per week.

Increase Pomegranate Juice

There is one clinical trial that shows 8 ounces of pomegranate juice a day results in a significant decrease in the rate of PSA increase from relapse after PCa local treatment. Use of unsweetened pomegranate juice as an adjunct in active surveillance and biochemical recurrence is supported with data and is suggested along with veggies and fruits.¹³

Decrease Animal Protein (avoid charred, pan fried red, white meat)

Frequent eating of red meat cooked at high temperatures (charred on the grill or pan fried) increases PCa risk, as does poultry cooked in similar fashion with skin. Hamburger appears to have the greatest risk, followed by red meat, pork, chicken (skinless) and the least, fish. One study showed a 63% reduction of PCa mortality associated with eating fish but another saw an increase if fish was pan fried until well done. Cooking methods matter. Baking has the lowest risk perhaps because it produces less heterocyclic amines (like PhIP) and polycyclic aromatic hydrocarbons than the other methods above.

Decrease Eggs:

Men who consumed 2.5 or more eggs per week had an 81% increased risk of lethal prostate cancer compared with men who consumed less than 0.5 eggs per week. 16

Decrease Dairy

In review, studies are divided as to whether milk and dairy increase PCa risk and progression. About half say it does to a small degree, half say dairy has no effect.¹⁷ However, as the least amount of dairy had the best reduction in risk, it seems reasonable to limit the amount of dairy in the diet.

CONTINUED ON PAGE 6

SELF-CARE (continued from page 5)

Moderate Supplementation of Healthy Fats; Avoid Unhealthy Fats

The health benefits from balancing essential fats like the omega 3 fatty acids from fish/fish oil/flax and the Omega 6 fatty acids from olive oil, etc. are well known. However, the benefit of excessive omega 3 supplementation to achieve decreasing cardiovascular events and cancer risk is now being called into question. For example, in a recent study, higher serum levels of Omega 3 actually correlated with an increase in high risk PCa, the exact opposite of what was expected. Limiting fish oil use to coldwater fish in moderation and occasional Omega 3 supplementation seems wise. High fat and trans fat consumption leads to obesity and coronary artery disease making them essential to avoid. A low fat, plant based diet still has the best results.

Self Care and Nutritional Supplements

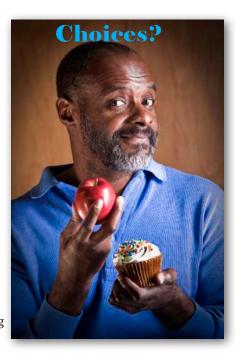
Supplements are like drugs; both have a systemic effect and an optimum range. Studies show too little or too much of a supplement can increase the risk of PCa.

Thus, taking a vitamin supplement may help if the person is deficient, but may not if a deficiency state does not exist. Supplementing a plant-based diet with B12 is a good example, as vegans can be low in B12 serum and intracellular concentrations.

Just as taking too little of a vitamin is suboptimal, so can taking too many vitamins. Food has nutritional value and if a supplement is added to fortified foods the total may increase intake above optimal amounts. Too much folate is an example.²⁰

The total daily intake of each micronutrient is the sum of all vitamins and food when added together. These totals are called Daily Reference Intakes (DRI's or RDI's) and you can calculate your own requirements at the USDA Food and Nutrition Information Center online http://fnic.nal.usda.gov/fnic/interactiveDRI/.

Work with your physician to determine supplement needs, dosing and duration. SpectraCell Laboratories offers a better series of tests (then serum levels) by monitoring lymphocyte intracellular concentrations of various nutrients.



Temper Intake of Multivitamins (as directed or less than one/day)

The National Cancer Institute conducted a study of 295,344 men and found no benefit from taking multivitamins in reducing PCa risk. Importantly, in those who took more than 7 multi-vitamins/week there was a 32% increased risk of developing advanced prostate cancer and a 98% increased chance of dying from PCa compared to those not taking multi-vitamins. While some have questioned these findings, it makes sense to get the majority of one's nutrition from whole foods, balancing multivitamin use to keep the DRI in its optimum range.

Increase Intake of Vitamin D (400-800 iu/day, 2,000 + to correct deficiency)

Vitamin D intake levels and serum concentrations are still controversial. However, a recent study showed that a great many adults (41% overall, 83% African American, 69% Hispanic) are below accepted minimum serum levels of 20ng/ml.²²

It is important to use supplementation to correct for vitamin D deficiency. For example, a study of men in active surveillance gave those with low serum vitamin D levels a 4000 iu supplement daily. Their low Vit D levels corrected to normal and saw a significant decrease in PCa progression at one year compared to controls.²³

However, in another study, high blood levels increased risk of aggressive disease.²⁴ This again stresses the need to monitor serum levels when correcting a deficiency. Getting 30 minutes of summertime sun daily and adding 2-3000 iu/day in winter to increase serum levels to about 50-100 nmol/mL (20-40 ng/mL) seems reasonable. A serum level above 150 nmol/mL (60 ng/mL) can lead to toxicity/adverse effects.

Temper Intake of Vitamin A (~900mcg RAE or ~3-5,000 iu retinol/ day)

Lycopene, a carotenoid, has shown effectiveness in the more advanced stages of PCa. However, there is limited/mixed support in the scientific literature for the use of supplemental vitamin A or beta-carotene above the DRI to reduce the risk of PCa.²⁵

SELF-CARE

Temper Intake of Vitamin E (~25 iu/day)

There are 2 types of vitamin E, tocopherols and tocotrienols, and both types occur in 4 forms, alpha, beta, gamma and delta. Gamma tocotrienols are showing anti PCa activity in PCa cell lines. However, vitamin E has not been proven clinically to be of benefit in reducing the risk of PCa. Of importance, in the most recent SELECT trial, 400 iu/day of d alpha tocopherol actually increased the risk of PCa.

Temper Intake of Vitamin C (~100 mg/day)

Most studies show insignificant or no PCa risk reduction with oral vitamin C supplementation. Serum saturation of vitamin C occurs at \sim 200 mg/day so taking higher doses orally is not effective. IV administration can raise serum levels dramatically higher and is showing promise in reducing treatment side effects in advanced metastatic PCa. Interestingly, the NIH is documenting IV vitamin C to produce prolonged remission in the treatment of some forms of advanced cancer.

Temper Intake of Vitamin B12 (1000 mcg/day sublingual supplement)

The restricted consumption of red meat in a plant-based diet requires Vitamin B12 serum level monitoring and supplementation to keep optimal levels. 15% of people and 50% of vegans are borderline (200-500 pg/ml) or fully deficient (<200 pg/ml) in their blood test. Given the difficulty of B12 absorption, 1000pg/ml/day taken oral or sublingual (or even injection by a physician) may be needed to correct a B12 deficiency to proper levels. A cautionary note however, one study found an unexpected increase of PCa risk with high serum levels of B12 (and folate) so monitor and return B12 to optimum serum levels (500-900 pg/ml), not above normal levels.²⁹

Temper Intake of Selenium

Although evidence was mounting that 200 mcg of supplemental selenium/day would decrease PCa risk, a recent well-done study (SELECT) shows no effect. To get an adequate RDI (DRI) of selenium (55mcg) per day from dietary sources is achievable. A well-balanced nutritionally dense diet is probably sufficient.

Temper Intake of Calcium (600 mg/day)

There is controversy over calcium supplementation. Some studies have shown no effect or a decrease in PCa risk with \sim 1,200 mg/day. More recently, studies are showing an increased risk of aggressive disease with higher levels. In a recent summary of multiple studies, the authors report high intake associated with higher PCa risk .³⁰ Calcium supplementation and Vitamin D are needed at optimal levels to combat osteoporosis. The RDI is a combined dietary and supplement total of 1,200 mg. Taking a 600 mg tablet/day with 600 mg coming from veggies, fortified soymilk, almond milk, orange juice, etc. is a wise balance.

Temper Intake of Zinc (~15 – 25 mg/day)

Like B12, when decreasing red meat and shellfish in a plant based diet, zinc needs to be added. Add Zinc with fortified cereals, beans, nuts and/or supplementation. A total intake, modestly greater than the DRI of 11 mg/day is healthy. A study of Swedish men who had a diet high in zinc (without any supplementation) showed a decrease in PCa progression when compared to those with low levels of dietary zinc intake. Finally, zinc supplements of 100 mg/day did not decrease PCa risk and over 100 mg. increased PCa risk significantly. Serum levels can help determine need.

For further information on supplements check out the NIH's Office of Dietary Supplements at: http://ods.od.nih.gov and go to Health Information, Dietary Supplemental Fact Sheets for Health Professionals. Great information.

Conclusion

Despite some negative news concerning vitamins there is still plenty of evidence that self-care can improve quality and duration of life after the diagnosis of PCa. As Dr. Mark Moyad has said many times at our PCRI conferences, "prostate health is heart health"! In other words, wise self-care decisions and habits decrease risk of heart attack, an event more likely to happen than death from prostate cancer. To be sure, a clean lifestyle, a low fat plant based diet with occasional fish, modest exercise and appropriate supplementation are things you can do to fight PCa. In the future we will explore other factors that help, like detoxing, reducing stress and making wise health care choices. Self-care reinforces the foundation for cellular health and the power to fight PCa. Helping empower you in this process is the PCRI's mission.

Shafique K, et al. Tea consumption and the risk of overall and grade specific prostate cancer: a large prospective cohort study of Scot-

For references go to Insights at www.pcri.org



Mark Scholz, MD Prostate Oncology Specialists

The 2013 ASCO Genitourinary Conference in Review Mark Scholz, MD, Co-founder PCRI

Every year, like a religious calendar, I attend at least four prostate cancer meetings to stay abreast of new developments. The first meeting of the year is hosted by the American Society of Clinical Oncology, Genitourinary Division. It is a multi-disciplinary affair, joining doctors from all three specialties: Roughly, 1,000 medical oncologists, 400 urologists and 300 radiation therapists were present.

Multiparametric MRI and Active Surveillance

The most compelling presentations were those discussing how to improve active surveillance. Dr. Peter Choyke of the NCI presented multiparametric-magnetic resonance imaging (MP-MRI) data that has given him confidence to use MP-MRI instead of using

repeat random biopsies for monitoring men on active surveillance. Biopsy is only used when a change in MP-MRI (or PSA) occurs. Dr. Chris Parker from the Royal Marston Hospital in England has gone one step further using MP-MRI before the initial random biopsy to diagnose prostate cancer. He reported that MP-MRI improves the odds of finding cancer. In certain cases he forgoes biopsy altogether when the MP-MRI shows only low grade disease. Both doctors reported that fusing the MP-MRI with an ultrasound-guided targeted biopsy improves biopsy accuracy. As its use increases and doctors become more familiar with this new technology, MP-MRI has tremendous potential to reduce the number of men requiring random biopsy either for screening purposes or for monitoring men on active surveillance.

Additional topics presented relating to active surveillance were: 1) The need to encourage greater implementation in the community, 2) the likelihood that prostate imaging will be substituted for needle biopsy in the future, 3) reducing the number of random biopsies and increasing the number of targeted biopsies, 4) further refining the accuracy of Gleason scoring and finally, 5) pointing out the relative weakness of PSA alone to detect cancer progression, especially when compared to imaging.

Testing for Two Molecular Targeted Therapies Fails

The results of two phase III multimillion dollar clinical trials evaluating survival in men with advanced disease were also reported. Sadly, when tested against placebo, neither of these two new targeted molecular therapies (afilbercept and dasatinib) showed improvement in overall survival.

Selected Abstracts from the Meeting

Perhaps a dozen of the 245 written abstracts and posters scientific presentations that were presented at the meeting caught my attention. I'll briefly highlight what they were about and why I think they are pertinent.

How Long should Hormone Blockade Continue in Men with *High-Risk* Prostate Cancer?

These days, men with *High-Risk* prostate cancer are generally treated with radiation combined with

testosterone-inactivating pharmaceuticals (TIP)—also known as androgen deprivation. Many published studies have established that the anticancer effects of TIP are further enhanced with more prolonged administration. However, the unanswered question had been, "What is



the precise point of diminishing returns? What is the optimal duration for TIP to be continued."? Previously published studies indicate that 24 to 36 months were necessary to extract the maximum benefit from TIP. However, Dr. Nabid from Canada did a study that was reported in Abstract #3 indicating that men treated with 18 months of TIP did just as well as those treated with 36 months. Along similar lines, in Abstract #83, Dr. Nanda from MD Anderson reported that 12 months of TIP was significantly better than 4 months in men with *High-Risk* disease. In my practice at Prostate Oncology Specialists our target treatment period for men with *High-Risk* is usually in the range of 12-18 months. We have long suspected that more protracted treatment simply adds unnecessary side effects without prolonging survival.

Does Proscar Convert Prostate Cancer from Low Grade into High Grade?

In the Prostate Cancer Prevention Trial that compared Proscar (finasteride) with placebo for preventing prostate cancer, slightly more men in the Proscar group were *diagnosed* with high grade prostate cancer. As a result, the FDA put out a warning about Proscar, suggesting that Proscar might *cause* high grade cancer. Most, but not all, experts derided the FDA's warning as scientifically unfounded because there was another perfectly plausible explanation for why more high grade disease was found in Proscar-treated men—Proscar diminished the size of men's prostate glands making high grade disease easier to detect with a random

biopsy. In any case, at this year's meeting Abstract #10 summarized an eighteen-year follow-up of the men from the original Proscar trial. It turns out that Proscar reduces prostate cancer mortality in men with low-grade disease. In men with high grade disease there was no effect on mortality one way or the other.

How Out of Control is the Overtreatment of Low Grade Prostate Cancer?

No one disputes that too many men are getting unnecessary radical treatment for prostate cancer. Several abstracts at the meeting quantified the degree of overtreatment. Dr. Hoffman from MD

Anderson concluded in his study published in Abstract #15 that, "The vast majority of older men, even those over 80, receive active treatment for favorable prostate cancer." In another study published by Dr. Gilbert from the University of Florida in Abstract #140, "Only 26% of men over age 75 are managed expectantly." He also reported lower observation rates in geographic areas where greater numbers of radiation oncologists were located. In Abstract #161 Dr. Aizer from Harvard studied the management of 11,000 elderly men with Low-Risk prostate cancer who had a life expectancy of less than 10 years. He reported that two-thirds of men were given unnecessary treatment.

When the Task Force said, "No More PSA Testing," Did Primary Doctors Listen?

Over the last few months I have heard various urologists and radiation therapists commenting that they are seeing lower numbers of patients with prostate cancer compared to previous years. They suspect that the widely-publicized 2011 US Task Force "D rating" of the PSA test is discouraging primary care physicians from recommending PSA screening to their patients, resulting in fewer patients being referred to urologists and less prostate cancer being diagnosed. Dr. Kathleen McGinley from the University of Medicine in New Jersey studied this issue in a 32-physician urology practice. She reported in Abstract #25 that the number of new patients referred was reduced by 12% compared to the previous year.

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Silvia Cooper Chief Administrative Officer

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Helping Men Know Their Options



Claudia Sangster, Esq.

Dear PCRI Supporter,

Each year approximately 240,000 men are diagnosed with prostate cancer in the USA, and 29,720 die.

Although I hate those statistics, it is important that men and their families are aware of them. We all need to be aware of the numbers - not to promote fear, but to promote awareness to protect our men. Awareness is the first step. Education is the next.

"Cancer" is a word that evokes intense emotion and fear. But armed with the right information, men and their families can mitigate that fear by understanding prostate cancer and learning about multiple treatment modalities explained in such a way that the "unknown" – which is usually the basis for such fear – is replaced with knowledge.

Where does a man find trustworthy, timely and relevant information about prostate cancer? The best place to find such information is at the Prostate Cancer Research Institute (PCRI). Through its programs, conferences, Insights newsletter and website, PCRI is dedicated to disseminating clear and concise information on prostate cancer, from prevention and diagnosis to staging of the disease to treatment options.

As a woman, I find that I have become increasingly touched by this disease; as more and more men in my life are dealing with prostate cancer. I want to make sure they are equipped with the knowledge they need. More importantly, I want to find a cure.

PCRI wants to be a place where help and enlightening information is just a click away when a doctor first says the words "prostate cancer" to a patient. To do this, pcri.org is being improved with high-level functionality and instructional videos from top physicians ready to teach about their latest advances in fighting this deadly disease.

The cost estimates for our improved website and online, on-demand prostate cancer-fighting educational programs are high. To accomplish this goal, we need your help.

We cannot do this alone. Yes, there are many worthy causes tugging at our hearts, minds, and wallets. Nonetheless, we ask that you stand with us and support PCRI's efforts to bring hope to the men and their families coping with prostate cancer.

You will be giving the gift of online, on-demand knowledge with your contribution today. You can mail in a check, donate securely through our website (pcri.org), or call us at 310-743-2116 with your credit card information (we accept all major credit cards).

Thank you for your kind consideration,

Claudie B Sange &

Claudia Sangster, Esq.

Blood Thinners Prolong Life in Men with Advanced Prostate Cancer

A number of older studies have previously reported that anticoagulant medications like Heparin or Coumadin have anticancer effects. One theory is that anticoagulated blood is "less sticky," making it difficult for cancer cells entering the blood stream to stick to the blood vessel wall and invade surrounding tissues. In Abstract #28 Dr. Caroline Pratz from John Hopkins retrospectively reviewed survival rates of 29 men receiving chemotherapy plus blood thinners and compared their survival to 218 men given chemotherapy without blood thinners. Her study concluded that blood thinners do prolong survival and that hazard for early cancer death was reduced by a third.

What Can be Done to Reduce the Risk of Rectal Burns after Radiation?

As recently as ten years ago external beam radiation resulted in non-healing rectal burns in almost one third of men! Presently, rectal burn rates, depending on the type of radiation—seed implants, IMRT, Cyberknife, proton, etc.—range between two and eight percent. The reason that rectal burns occur is easy to understand. The rectal wall is only 3 millimeters from the prostate. When the prostate is radiated, the anterior rectal wall is invariably radiated as well. However, a fairly simple solution is being developed (actually a gel). Dr. Danny Song from Johns Hopkins reported in Abstract #35, that hydrogel can be injected between the rectum and prostate, pushing the rectal wall more than seven and a half millimeters away from the gland, reducing the amount of radiation exposure by more than 90%. This solution is simple, safe, and needs to be rapidly implemented for men getting radiation once it gets FDA approved. I also predict it will be popular to reduce risks for rectal damage for men undergoing other treatments such as HIFU, cryotherapy, electroporation or laser therapy.

Xtandi (MDV-3100) Can Safely be Administered at the Same Time as Taxotere

The FDA has recently approved Xtandi for prostate cancer. But no one knows if it's safe to combine it with chemotherapy such as Taxotere. Mark Flemming, from Virgina Oncology Associates in

Abstract **#63**, tested Taxotere blood levels in men taking Xtandi. The levels of Taxotere are unaffected by Xtandi, indicating it is safe to administer them together.

Provenge Delays the Onset of Bone Pain

Two previously published studies have demonstrated that Provenge prolongs life. These studies were the basis of Provenge's approval by the FDA in 2010. However, some have questioned the clinical utility of Provenge given that declines in PSA after treatment are uncommon. That concern may be partially assuaged by Dr. Eric Small from UCSF. He reported in Abstract #74, that when 341 men treated with Provenge were compared to 171 men treated with placebo, the hazard ratio for developing painful bone metastasis was reduced 27%.

More Will be Coming Soon

After many years of slow progress, prostate cancer meetings are becoming much more interesting and exciting compared to earlier in my career. More studies are being published and the quality is higher. The next major prostate cancer meeting will be the American Urological Association convention this month. Fifteen thousand urologists are convening in San Diego to present hundreds of scientific papers related to prostate cancer. My anticipation for rapid improvement in prostate cancer therapy has never been higher.



View Dr. Dorff's video on pcri.org Live from the ASCO Conference "Hope after Diagnosis"



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STRENGTH TRAINING

Build Bone Health Through Strength Training



Joe and Joseph Horning

Strength Training For Bone Health* By Joseph Horning and Dr. Foster

All of us need strength training to keep our body and bones healthy. Aging and testosterone decrease can be counteracted with even a moderate amount of strength training. I met Joe and son Joseph at the gym. They are following a family tradition of father-son workouts.

Joe has a life time of experience and advice. Light weights or your own body weight can be used to reduce the effects of cancer and/or cancer treatment. We have recommended

a few basic and gentle movements that can be done at home in order to maintain and promote muscle and bone strength. Begin carefully as to avoid causing any unnecessary injury. As you build up strength you can slowly increase the intensity of your workouts being sure not to overwork yourself.



Push-Ups

As simple as they sound, push-ups do a lot for your upper body strength. Starting on the ground, bed, chair, counter, or wherever is comfortable and sturdy; place your hands shoulder width apart and your knees on the ground. Slowly lower your body to the floor and then push yourself up again. Do this 12 times, or as close to 12 as possible, then stop. Repeat this movement two more times for a total of three sets. If the movement is too easy use your feet to support your lower body instead of your knees.



Tricep-Dips

This move requires a chair, or any secure surface about two feet off the ground, with plenty of room around it. Place your hands behind you on the chair and your feet out in front of you. Once you've supported your body, slowly lower yourself by bending your elbows. Go only as low as is comfortable on your joints. Then simply raise your-self back up to complete the dip. Just like before; do this 12 times for a complete set and perform 3 full sets for a complete workout.



Calf-Raises

Now let's include some leg movements. It's recommended to have a kitchen counter, or some ledge to help keep you balanced. Standing one foot at a time, or both if you prefer, slowly stand up on the tips of your toes. Then lower back on to your heels. To get more of a stretch stand on a phone book, or something of similar size, letting your heel hang off the edge.

*Doctor's approval advised

Areas of awareness to develop are:

Strength, Balance, Agility, Flexibility, and Cardiovascular.

We are in the fund-raising stage of developing a series of strength training videos specifically for prostate cancer patients. If you wish to contribute to this project please contact us at 310-743-2116

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Dr. Foster's Breakfast Choices By Jeanne Foster

They say the way to a man's heart is through his stomach! That can be a challenge if he is used to eating bacon for breakfast! Blueberries can become the kind of treat that says, "I love you and want to take good care of you with these mighty anti-oxidant delicious little berries!

A favorite at our house is toasting raw old-fashioned oats in a dry skillet. Stir to avoid over browning. Add almonds, unsweetened coconut and currants or raisins. Of course you can choose to add what you like. We now know almonds are the lowest PH of all the nuts and

are a good choice. Pears and berries with coconut milk give this breakfast anti-oxidants, calcium, fiber and nutrients.

Another day we may choose papaya, berries, apples and some bran for fiber. A substitute for regular milk is almond milk. It's non-dairy and a protein with the bonus of good PH. Your best choice is to make both almond and coconut milk at home. Coffee, with it's acidity, can cancel the good effects we just gained. As an alternative morning drink, a green and peach tea mix can be substituted.



[&]quot;Internet research is a great resource for cancer fighting food ideas. Having moderation with some of our more unhealthy treats is the first step in the fight against cancer."

-Ieanne Foster

Focal Treatment for Prostate Cancer

Mitchell Kamrava, MD, Clinical Professor, Dept. of Radiation Oncology, UCLA



Mitchell Kamrava, MD

Is It Really Necessary to Treat the Whole Gland?

There is a new advance on the horizon for treating prostate cancer that is localized in the prostate gland. It promises to be as effective as whole gland therapy with fewer complications. It is called "focal treatment for prostate cancer".

There will be approximately 240,000

men newly diagnosed with prostate cancer (PCa) this year. The majority of them will have low risk disease. They will be faced with a dilemma: pursue definitive treatment, with its risk of incontinence and impotence or choose active surveillance, with the possibility of missing the window of opportunity for early control or even cure.

Definitive treatment with either surgery or radiation can result in significant changes in a man's long-term quality of life. For example, brachytherapy's late onset complications include a risk of 1-5% gastrointestinal dysfunction, 5-10% genitourinary dysfunction and 30-40% erectile dysfunction (1). Active surveillance is an excellent alternative with far less risk but has been limited by the need for close monitoring with repeated biopsies to monitor for cancer progression. Focal therapy presents a middle ground between definitive whole gland therapy and active surveillance.

Male Lumpectomy

Focal treatment is called "the male lumpectomy." The goal of focal treatment is to treat just the cancer, sparing the rest of the gland and nerves while achieving optimal cancer control and reducing short and long-term changes in quality of life.

Organ preservation, where only the area with cancer is removed, has become a standard for many other types of cancer (breast, lung, stomach, pancreas, rectum, kidney, etc.). For prostate cancer, however, partial gland treatment is not standard. If an individual has 1 core positive in the right apex or 10 cores positive on the right and left sides of the prostate the entire gland is treated in both cases. Limitations in accurately imaging the PCa in the gland and the ability to precisely target and deliver the treatment have prevented focal therapy from becoming a reality. Furthermore, review of prostatectomy specimens demonstrates that prostate cancer is a multifocal process in about 80% of men (2). Given the difficulties with "seeing" the PCa tumor and the fact that many men have multifocal disease has led physicians to treat the entire prostate gland.

These limiting factors that have been hindering focal therapy are now changing. Multi-parametric MRI imaging (MP MRI) has markedly improved our ability to define the prostate's anatomy and identify prostatic disease including PCa within the gland. (3) Also, improved targeted biopsy techniques, fusing ultrasound and MP MRI images together, has defined the PCa lesion more accurately both in location and grade.(4) These improvements mean we can now have a chance to destroy just the cancer, leaving surrounding vital structures intact.

Of course, there are some limitations to this. For example, the MP MRI, is unlikely to miss a Gleason score 8-10 focus of disease, but may miss a small foci of Gleason score 6 disease. Is missing a low risk lesion acceptable? (5)

The concept of the *index* lesion helps explain why missing a small foci of low grade PCa does not preclude focal therapy. One of the strongest arguments against focal therapy is that prostate cancer is a multifocal process. If the other areas of PCa are missed, then only a small group of men who have unifocal disease would be amenable

to focal treatment. The index lesion concept advocates that regardless of whether prostate cancer is multifocal or not, the danger of disease progression is typically driven by the largest/highest grade tumor focus, or "the index lesion" (6). This concept suggests that these smaller lesions are unlikely to be clinically meaningful and can be followed by "active surveillance" while the more deadly lesion is eradicated. It is estimated between 50-60% of men have an index lesion with otherwise small foci of disease that is appropriate for "active surveillance"

and focal treatment.

How is Focal Treatment Accomplished?

There are multiple treatment platforms for delivering focal treatment. Each technique utilizes a different type of energy to kill cancer cells. There are thermal approaches that include either cold (cryoablation) or heat (high-intensity frequency

ultrasound and laser therapy), and non-thermal approaches that include photodynamic therapy, irreversible electroporation, and radiation.(7)

Cryoablation using small diameter, argon based technology is available and uses localized freezing to kill tumor cells. It is done using ultrasound guidance. The small probe is placed through the perineum directly into the prostate tumor.

HIFU or High Intensity Focused Ultrasound treatment is typically delivered via a transrectal ultrasound probe. In the last issue of Insights, Dr. Laurence Klotz wrote about the development of a trans urethral HIFU delivery system coupled with heat sensing real time MRI to focally ablate PCa.

Laser therapy is performed by inserting an optical fiber into the prostate via a transperineal approach. Once activated, a roughly spherical zone of destruction of about 1 cm in diameter is created over 2-4 minutes.

Photodynamic therapy uses a method where a drug is given intravenously and is taken up by PCa tumor cells. The drug is activated when it is exposed to a specific energy of light. This light is brought to the tumor through special fibers that are placed via a trans peroneal approach.

Irreversible electroporation passes an electrical current through the tumor that creates holes in tumor cells resulting in cell death. This method uses either ultrasound or MRI to direct therapy.



For radiation the most common method used for focal therapy is brachytherapy. This type of treatment uses either radiation seeds (low dose rate brachytherapy) or hollow little tubes where a radiation source runs in and out of the tubes (high dose rate brachytherapy) to

precisely deliver radiation directly to the tumor.

There is reasonable clinical experience with cryotherapy, HIFU, and radiation however there is limited data with laser therapy, irreversible electroporation, and photodynamic therapy. It's currently not known whether one of these techniques is advantageous to another. Experience is accumulating with all techniques.

Radiation, however, has the longest follow-up and experience in treating less than the whole gland. The largest study to date investigating focal therapy was recently updated by Nguyen *et al.*(8) 318 patients were treated using intraoperative MRI guidance to deliver low dose rate brachytherapy to the peripheral zone of the prostate only. With a median follow-up of 5.1 years patients with low risk disease had 5 and 8 year PSA control of 96% and 90% (nadir+2 and PSA velocity >0.75 definition of PSA failure). These results are similar to what is expected with whole gland therapy. Focal brachytherapy results at UCLA are preliminary but

Focal Treatment for Prostate Cancer(continued)

are showing excellent promise in lowering side effects while still treating the index cancer lesion. (9)

Technological advances in delivering different energies to kill localized areas of the prostate with advances are combining within MP MRI and fusion biopsy data to make focal treatment of PCa an attractive adjunct to active surveillance. The annual Montreal Conference on Focal Treatment for Prostate Cancer can be reviewed online to keep abreast of the rapid advances in this field. Our impression is that this type of research and collaboration will confirm focal therapy's effective use in localized prostate cancer and confirm much less morbidity than present whole gland treatment.

References

- 1. Demanes D, et al. American Brachytherapy Society consensus guidelines for high-dose-rate prostate brachytherapy. Brachytherapy, 2012. (1): p 20-32
- 2. Tareen B, Sankin A, Godoy G, et al. Appropriate candidates for hemiablative focal therapy are infrequently encountered among men selected for radical prostatectomy in contemporary cohort. Urology, 2009. 73(2): p. 351-4
- 3. Turkbey B, et al. Multiparametric 3T prostate magnetic resonance imaging to detect cancer: histopathological correlation using prostatectomy specimens processed in customized magnetic resonance imaging based molds. Journal of Urology, 2011. 186(5): p. 1818-24.
- 4. Sonn G, et al. Value of targeted prostate biopsy using magnetic resonance-ultrasound fusion in men with prior negative biopsy and elevated prostate-specific antigen. European Urology, 2013. March 1,7 E pub.
- 5. Carter H, Partin A, Wlash P, et al. Gleason score 6 adenocarcinoma: should it be labeled as cancer?

Journal of Clinical Oncology, 2012. 30(35): p. 4294-4296.

- 6. Ahmed H. The index lesion and the origin of prostate cancer. New England Journal of Medicine, 2009. 361(17): p. 1704-1706
- 7. Coleman J, Sacrdino P. Targeted prostate cancer ablation: energy options. Curr Opin Urol, 2013. 23: p. 123-128
- 8. Nguyen P, et al. Updated results of magnetic resonance imaging guided partial prostate brachytherapy for favorable risk prostate cancer: implications for focal therapy. The Journal of Urology, 2012. 188(4): p. 1151-1156
- 9. Kamrava M, et al. Focal high-dose-rate brachytherapy: a dosimetric comparison of hemigland versus conventional whole-gland treatment. Brachytherapy, 2013. Feb 11, E pub.



2013 Harry Pinchot Awardee

for dedication and support to the prostate cancer community



Harry Pinchot was widely recognized as one of the most knowledgeable laymen in the biology, prevention and treatment of prostate cancer. Pinchot made a positive impact on the lives of countless men afflicted by prostate cancer, and their loved ones, through his efforts at the Prostate Cancer Research Institute (PCRI).

He served as PCRI's Program Director for over a decade, and was known as "Helpline Harry" because he was always taking calls from concerned prostate cancer patients. His devotion to the mission of educating men and highlighting the plight of those affected by the disease has earned him national recognition.

Harry Pinchot lost his 13-year battle with prostate cancer in January 2008. In his honor, PCRI would like to recognize unsung heroes like Harry that are out there making a difference in other people's lives. Winners from previous years include: Howard Hansen, Johnny R. Payne, Bill Blair,

Ralph Valle, Chuck Maack, Murray Corwin, Peter Doherty and Lyle LaRosh.

Only individuals may be nominated. These men and women will be judged by their accomplishments and personal attributes that show excellence in prostate cancer education, research, advocacy, and community support.

WHO MAY NOMINATE:

Any individual or organization

REQUIREMENTS:

- 1. Completed nomination form and nominating letter (see attached)
- 2. Letter of recommendation from any of the following: a medical professional, a research organization, a member of the prostate cancer community.

Instructions: Please submit completed application (on next page) to:

Prostate Cancer Research Institute

Attn: Harry Pinchot Awards Committee

5777 W. Century Blvd., Suite 800

Los Angeles, CA 90045

Applications should be postmarked no later than July 31, 2013. Receipt notices will be e-mailed or mailed out to nominees as well as the nominating organization or individual.

SELECTION:

An evaluation committee will read and review the submissions. One individual who best exemplifies the attributes and accomplishments of Harry Pinchot will be selected to receive the Award*, which will be presented on Saturday, September 7, 2013 at the Gala Dinner during the Prostate Cancer Conference at the Marriott LAX Hotel in Los Angeles, California. The Awardee will receive: a plaque of recognition, \$500 cash and gifts, all-expense paid trip to attend the 2013 conference, and a lifetime registration-free access to PCRI conferences and supply of PCRI's educational materials.

2013 Harry Pinchot Award Nomination Form

Your Information:

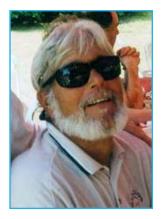
Nominee Information:

Your Name		Name of Nominee	
Address City, State, Zip		Address City, State, Zip	
EMAIL		EMAIL	
TELEPHONE		TELEPHONE	
Please attach a separate letter, describing why this nominee is deserving of the Award. In your letter please address the following: 1. Accomplishments (PC education, research, advocacy and community support);		Organizational Affiliation	
3. Contributi	naracteristics; ons to the community; cognition received.	WEBSITE	
Please feel free to submit other documentation (newspaper clippings, photos, certificates, etc.) for your nomination. Limit your			

In Memory of Dominic Anthony Manarite

(April 17, 1942 - April 12, 2013)

By Jan Manarite, PCRI Senior Educational Facilitator



letter to 750 words.

After a 13 year battle with advanced, metastatic prostate cancer, Dominic Anthony Manarite has finally left this world and crossed over into Heaven.

Dominic was best known on Sanibel and Captiva Islands in the 90's as Captain Dominic of Janice Too Charters at Castaways Marina, and previously as a favorite bartender at 'Tween Waters Inn. He also worked at Bailey's Liquor Store, "The Grog Shop" in recent years after leaving the charter guide business.

In his younger years, Dominic was an avid auto paint & body man, including owning his own shop in Dania Beach, Florida for several years. He was known by family and friends as being skillful in woodworking, metal work, painting, and almost every other type of tool and material you can name.

Dominic was born in Springfield, MA on April 17, 1942. He was the son of Antonio V. Manarite and Frances P. (Williams) Manarite.

Dominic leaves behind his wife, Jan and their son, Mico. He also leaves behind his son, Tony and daughters, Gina, Carla and Nicole, of Springfield, MA, along with their respective families. He leaves his brother, Michael and wife, Simone – his sister, Addie and her family in Texas – and his sister, Toni and her family in Massachusetts. Dominic passed away peacefully on April 12, 2013 in the capable hands of nurses from the Hospice House in Fort Myers, FL. He found great peace in his final months by short, simple prayers with his wife, being read to from books written by those who have had end-of-life experiences, and saying his Rosary in private.

Condolensences can be sent to Jan's family at JManarite@pcri.org. In lieu of flowers, the family asks that you consider a donation to PCRI in Dominic's name.

2013 Conference: Entertainment & Excursions*





Saturday Night: Jerry Peters and Friends

Due to the overwhelming popularity of last year's performance, Grammy Award-winning musician Jerry Peters will return to perform at the Saturday Night Dinner Gala!

Grammy Museum

Celebrate some of the world's most accomplished musicians on this exciting excursion to the Grammy museum in the heart of Los Angeles!



Hollywood Bowl

Join other conference attendees to see Blue

Man Group perform live at the famous

Hollywood Bowl!

For our limited-time early-bird fee of \$60, please complete the form on page 23 and return to PCRI no later than June 31, 2013. You can also register online at PCRI.org, or by calling the PCRI office at 310-743-2116.

*Subject to change. Please visit www.PCRI.org for up-to-date conference information.

Conference Agenda

Friday, September 6, 2013

Introduction to the Prostate Cancer Conference

FACULTY	TOPIC	
Dean Foster, MD Medical Director PCRI	Prostate Cancer Growth Arrest Through Self-Care	
Jan Manarite Senior Educational Facilitator	Advanced Prostate Cancer	
Nathan Roundy	Newly Diagnosed	
PCRI Educational Facilitators	Panel Discussion Q&A	

Saturday, September 7, 2013

General Sessions		
FACULTY	TOPIC	
Charles Myers, MD Medical Oncologist, American Institute for Diseases of the Prostate	Managing Treatment- Related Side Effects	
Nicholas Vogelzang, MD Medical Oncologist, Comprehensive Cancer Centers of Nevada	Advanced Disease	
Mack Roach III, MD Chairman of Radiation Oncology, UCSF	Radiation Oncology	
Timothy Wilt, MD Internal Medicine Physician, Veterans Affairs Medical Center	PIVOT Study: Surgery vs. Observation	
Timothy Wilt, MD Internal Medicine Physician, Veterans Affairs Medical Center Mack Roach III, MD Chairman of Radiation Oncology, UCSF	The PSA Screening Controversy: Debate	
Duke Bahn, MD Medical Director, Prostate Institute of America Mark Scholz, MD Medical Director, Prostate Oncology Specialists	Live On stage Prostate Biopsy	
Charles Drake, MD, Ph.D Associate Professor of Oncology, Johns Hopkins	New Treatments in the Research Pipeline	
Andrea Singer, MD Associate Professor, MedStar Georgetown University Hospital	Women's Issues	

PLUS: Back by popular demand: Jerry Peters and Friends will once again perform along with a keynote by David Hung, M.D., President/CEO, Medivation at the Saturday Night Dinner Gala!

Conference Moderator:

Mark Moyad, MD, MPH

Jenkins/Pokempner Director of Complementary & Alternative Medicine Univ of MI Med Center-Dept of Urology



Sunday, September 8, 2013

Ask the Experts (2 sessions)

ASK the Experts (2 sessions)		
FACULTY	TOPIC	
Steven Finkelstein, MD Radiation Oncologist, Director TRC 21st Century Oncology	Radiation	
Jeff Turner, MD Medical Oncologist, Prostate Oncology Specialists	Chemotherapy	
Mark Scholz, MD Medical Director, Prostate Oncology Specialists Duke Bahn, MD Medical Director, Prostate Institute of America	Active Surveillance & Focal Therapy	
TBA	Nutrition and Fitness	
Charles Myers, MD Medical Oncologist, American Institute for Diseases of the Prostate	Hormone Therapy	
John Kurhanewicz, Ph.D. Professor of Radiology and Biomedical Imaging; Pharmaceutical Chemistry; Urology UCSF	Imaging	
Charles Drake, MD, Ph.D Associate Professor of Oncology, Johns Hopkins	Immunotherapy	
Mark Kawachi, MD Clinical Associate Professor of Urological Oncology City of Hope	Surgery	

Sunday, September 8, 2013

Roundtable Discussion

FACULTY	TOPIC
Various Speakers	Case Studies

Faculty and agenda subject to change.

Please visit **www.PCRI.org** for updated faculty, registration and travel information.

To register for the 2013 conference with our limited-time early-bird fee of \$60, please complete the attached form and return to PCRI no later than May 31, 2013.

You may also register online by visiting **www.PCRI.org**, or by calling the PCRI office at **310-743-2116**.

Registration

ATTENDEE 1 – Primary Contact

ast Name	_
rst Name	
ddress	
ity, State, Zip	
ountry	
mail	_
elephone	

EARLY REGISTRATION DISCOUNT EXTENDED to JUNE 31st



ATTENDEE 2

Last Name	
First Name	

FEES

	Price	Qty.	Total \$
Registration Fee			
Early (thru 06/31/13)	\$60		
Regular (thru 9/5/13)	\$120		
On-Site	\$150		
Saturday Gala Dinner	\$60		
Excursion			
Hollywood Bowl (Fri)	\$50		
Grammy Museum (Sun)	\$30		
Subtotal			

Tax-Deductible Donation to PCRI**

	Level	Qty.	Total \$
Admiral's Circle	\$5,000 & Up		
Patron	\$1,000 & Up		
Sponsor	\$500 & Up		
Supporter	\$250 & Up		
Colleague	\$150 & Up		
Associate	\$100 & Up		
Friend	\$50		
Other Amount			
Subtotal			
Total			

**Prostate cancer will strike 1 in 6 men. Your generous donation helps us fight prostate cancer through research, education and increasing public awareness.

The official conference hotel is the Marriott LAX Airport Hotel located at 5855 W. Century Blvd., Los Angeles, CA. A limited number of discounted rooms are available for \$95/night by calling 310-641-5700 and mentioning group code NCPNCPA, or by visiting www.PCRI.org for an online booking link. This group rate is available only until August 14, 2013.

Discounted airline tickets to/from LAX are available by calling American Airlines at 800.433.1790 or visiting www.aa.com. Use group code A5793BH.

Discounted car rentals are available through AVIS by mentioning code D016398 when calling 800.331.1600.

Self-parking at the venue is \$10/day and valet parking is \$25/day. Complimentary hotel shuttles are available at LAX (under the red sign).

Cancellations and refund requests will be honored only if made in writing no later than August 15, 2013.

METHOD OF PAYMENT

Check made payable to PCRI	
Credit Card Number	
Security Code	_ Expiration Date
Billing Zip Code	
Card Holder's Name	
Signature	

TO REGISTER

Mail completed registration form and payment to:

5777 W. Century Blvd., #800, Los Angeles, CA 90045

Fax to: **310.743.2113**Call: **310.743.2116**Online at: **www.PCRI.org**









MORT PROSTATE CANCER WHEE SHEEKHEE TRAVIOUS



See page 14 for more details

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SAVE THE DATE:

September 6-8

Saturday Night Fun: Jerry Peters and Friends

Due to the overwhelming popularity of last year's performance, Grammy Award-winning musician Jerry Peters will return to perform at the Saturday Night Dinner Gala!

