The effect of the U.S. Preventive Services Task Force (USPSTF) recommendation in 2007 against PSA screening was not expected to have an effect on metastatic disease rates for several years. But a study presented at the 2017 annual meeting of the American Urological Association (AUA) shows that since 2007, disproportionately more men are presenting with PSA levels greater than 20 ng/mL and metastatic disease. The investigators hypothesized that this higher disease burden at diagnosis may represent a near-term result of USPSTF recommendations.

“Since PSA is a rough surrogate for disease burden, we sought to determine if the PSA diagnosis of metastatic prostate cancer (mPCA) is rising in the National Cancer Database (NCDB),” said lead investigator Jared P. Schober, MD, from Lahey Hospital & Medical Center.

“If you presented with a PSA greater than 20 in 2004, your odds of having mPCA were 8.5%, and that increased more than threefold, to 22.9% in 2014,” he said. Dr. Schober said there are several possible explanations for increased disease burden: the USPSTF 2007 recommendation; a detection bias; an internal change in the data entry process; or centralization of care in patients moving from rural settings to cities with tertiary care centers. The retrospective study evaluated 1,235,869 cases of incident PCa that occurred (Continued on page 5)

How Nerves Fuel Prostate Cancer Growth

Certain nerves support the growth of prostate cancer (PCa) via a tumor vessel proliferating “switch,” according to a study by researchers from the Albert Einstein College of Medicine. This finding could lead to a new strategy for treating PCa.

Dr. Paul Frenette, of the Departments of Medicine and Cell Biology at the Albert Einstein College of Medicine in New York City, NY, led the study. The findings from the new research are published in the journal Science.

“Solid tumors depend on an expanding blood supply to thrive,” says Dr. Frenette. “Here we show that nerves stimulate the new blood vessels that encourage prostate tumor growth and that we can short-circuit nerve stimulation to prevent new vessels from forming.”

“This opens up an entirely new strategy for treating prostate cancer – one that we may be able to pursue using existing drugs,” he adds. Earlier research by Dr. Frenette and colleagues discovered that nerves play a primary role in the development and spread of prostate tumors.

More specifically, the team found that the nerves of the sympathetic nervous system – which controls the body’s “fight-or-flight” response – drive the growth of tumors by producing the neurotransmitter norepinephrine. Norepinephrine promotes tumor growth by “binding to and stimulating” receptors on the surface of tumor connective tissue cells. Now, using a mouse model of prostate cancer, researchers reveal how the nerves in connective tissue fuel tumor growth. (Continued on page 4)

Cancer Can Change Tissue That Surrounds It

University of California (UC) Study Finds

Tissue around tumors can look normal, but its genetic composition may have changed in ways that help cancer spread, a study reports.

The key difference between the genetic make-up of the tissue after a tumor appears is that it contains more genes that can generate inflammation-promoting proteins. Increased inflammation can help the malignancy spread, according to the study, which included prostate cancer.

UC San Francisco researchers conducted the study, which was the first large-scale molecular-level analysis of tissue surrounding tumors. The research, published in Nature Communications, is titled “Comprehensive analysis of normal adjacent to tumor transcriptomes.” The team discovered changes in surrounding tissue can occur in several cancers. This highlights the changes’ importance, they said.

“Tumors secrete factors [substances] all around, changing nearby tissue and possibly even tissues that are far away,” Dvir Aran, the study’s lead author, said in a press release. Aran is a post-doctoral fellow at the university’s Institute for Computational Health Sciences.

In many cancer studies, researchers compare tumor tissue with that of tissue surrounding the tumor to look for changes occurring in the cancer tissue. The new findings suggest that while surrounding tissue may look
Patterns of Prostate Specific Antigen Test Use in the US, 2005-2015
Berkowitz Z, Li J, Richards TB, Marcus PM
Am J Prev Med 16 October 2017; Epub

Recommendations for PSA-based screening for prostate cancer are placing increasing emphasis on men aged 55-69 years. The goal of the current study is to describe patterns of population-based PSA testing with details about that age group.

National Health Interview Surveys from 2005 to 2015 were analyzed in 2017 to estimate routine PSA testing in the past year from self-reported data by age group (40-54, 55-69, ≥70 years), and also by risk group, defined as African American men or men with a family history of prostate cancer vs. other men. Differences between successive survey years by age and risk groups were assessed by predicted margins and rate ratios with 99% confidence intervals (CIs), using logistic regressions.

PSA testing among men 55-69 years old decreased from a high of 43.1% in 2008 to a low of 32.8% in 2013, with no significant change in 2015 at 33.8%. Men aged ≥70 years had consistently high prevalence in all survey years, ranging from 51.1% in 2008 to 36.4% in 2015. African American men, men with a family history of prostate cancer, and other men showed a 5% absolute decrease over time, but this reduction was significant only in other men.

Despite decreases, the absolute change in prostate-specific antigen testing for men aged 55-69 years was small (9.3%) over the study period. Men aged ≥70 years, for whom the benefits are unlikely to exceed the harms, continue to have consistently high testing prevalence.

Utility of Digital Rectal Examination as an Adjunct to Prostate Specific Antigen (PSA) in the Detection of Clinically Significant Prostate Cancer
J Urol; article in press DOI: http://dx.doi.org/10.1016/j.juro.2017.10.021

Purpose: Guidelines from the National Cancer Care Network (NCCN) advocate digital rectal examination (DRE) screening only in men with elevated PSA. We sought to investigate the effect of PSA on the association between DRE and clinically significant prostate cancer (CSPC) in a large, U.S. cohort.

Materials and Methods: Men undergoing DRE (n=35,350) in the screening arm of the Prostate, Lung, Colorectal and Ovarian (PLCO) Cancer Screening trial were evaluated for onset of CSPC (Gleason ≥7) with follow-up of 343,273 person-years (years of follow-up for all patients). Primary outcome was the rate of CSPC among men with and without suspicious DRE. We performed competing-risks regression to evaluate the interaction between time-varying suspicious DRE and PSA.

Results: 1,713 CSPCs were detected with 10-year cumulative incidence of 5.9% (95% confidence interval [CI] 5.6-6.2%). Higher risk was seen among suspicious vs. nonsuspicious DRE. Increases in absolute risk were small and clinically irrelevant for normal PSA (<2ng/mL) – 1.5 vs. 0.7% risk of CSPC at 10 years, clinically relevant for elevated (PSA ≥3 ng/mL) – 23.0 vs. 13.7%, and of modest clinical relevance for equivocal (PSA 2-3 ng/mL) – 6.5 vs. 3.5%.

Conclusions: DRE demonstrated prognostic utility when PSA is >3 ng/mL, limited utility when PSA is <2 ng/mL, and marginal utility for PSA 2-3 ng/mL. These findings support restriction of DRE to men with higher PSA as a reflex test to improve specificity. It should not be used as a primary screening modality to improve sensitivity.
There are several clinical trials ongoing of intravenous (IV) vitamin C as a potential anti-cancer agent, but thus far nothing dramatic has been found and, in the most recent small clinical trial with prostate cancer patients, there are some reasons to be concerned (AKA worried and should at least initiate a discussion of the pros and cons with doctors and patients).¹

I love vitamin C because I want to believe it can prevent colds and even reduce the duration of colds. ( Heck I even take it when I just feel bad... like right after the Michigan football team loses.) But, at the same time, I realize in this life that everything comes with a catch (except for beer – no catch at all because it always tastes good in moderation and the type I buy is always dirt cheap). Vitamin C in larger dosages can not only increase the risk of kidney stones, but it can also cause the fecal occult blood test (FOBT) for colon cancer screening to be normal when in fact there is blood in your stool (false negative test). Some folks want to really believe in the power of vitamin C as an anti-cancer treatment. This is not the pill form but the IV form, where you can deliver much greater dosages of vitamin C to the cancer. Through the years, there has been some suggestion that IV vitamin C might make some people feel better, so some spend cash to receive IV vitamin C at alternative clinics around the U.S.

Now, for the new and potentially bad news about IV vitamin C based on a recent phase II trial. Researchers at the Copenhagen University Hospital decided to give weekly infusions of vitamin C to 20 men with metastatic castration-resistant prostate cancer (CRPC) naïve to chemotherapy. After 12 weeks, no patient experienced a 50% PSA decline, but instead a median increase in PSA of 17 points was observed. Also, more than half of the men experienced either biochemical or clinical progression at just six weeks into the study. There were no indications of disease remission, there were 53 side effects recorded, and 11 were considered serious. Does this mean IV vitamin C could stimulate tumor growth? It does. BUT it also means overall we are not sure what the heck happens – good, bad, or nothing. What it currently means for men with advanced prostate cancer is that they should at least be told there are possible concerns and also plenty of past evidence to suggest lack of anti-cancer activity.² What is needed now? Of course, a large placebo-controlled study and perhaps it should be tested in men with local or locally-advanced disease instead of the traditional past thinking of simply testing alternative agents in men with metastatic cancer.

Regardless, I am not feeling as cuddly or as much love for vitamin C in IV form for cancer after this latest study, so I just wanted you to know the latest and greatest and in this case... well not so great.

P.S. Happy Holidays and Don’t Forget to Donate to Us Too before January 1, 2018!

References:

Harm Seen in Alternative Treatments Though Early Prostate Cancers Likely Exception

Over the years, the side effects of radiation and chemotherapy have been studied and debated by physicians and questioned by cancer patients, some of whom have turned to alternative treatments.

A database study of four common cancers in the U.S., breast, prostate, lung, and bowel, found that patients with non-metastatic cancer who declined “conventional treatments” were more likely to die within five years of diagnosis vs. those who undergo standard care, with the exception of low- and intermediate-risk prostate cancers not in need of extra care.

The study by Sklyer Johnson, a radiotherapy cancer specialist at Yale University, was published in the Journal of the National Cancer Institute, under the title “Use of Alternative Medicine for Cancer and Its Impact on Survival.”

Cancer patients have the right to decide the type of treatment they feel most comfortable with, but being well-informed of the pros and cons of each option is crucial, and such information may not be readily available. To understand the potential harm of such alternatives, Johnson gathered data from cancer patients who opted for unconventional cancer therapies. He began investigating the issue on the web after his wife was diagnosed with Hodgkin’s lymphoma, a type of blood cancer.

“It was during my second year of medical school when my wife was diagnosed with Hodgkin’s lymphoma,” he said in a news release. “Despite the fact I was training to be a doctor, I did what many people probably do. I was curious and searched the Internet.”

Because of his medical training, Johnson was equipped to easily spot misleading or factually wrong information regarding the subject. While his wife made a full recovery, he was stunned at what he found and decided to conduct a formal study.

Using the U.S. National Cancer Database, Johnson collected patient records sent from over 1,500 cancer hospitals across the U.S., which included more than 70 percent of all newly diagnosed cancer cases.

Johnson examined data from prostate, breast, lung, and gastrointestinal cancers, and looked for a specific code (each representing different treatments) relative to “unproven treatments given by non-medical therapists.”

Among the millions of records, 281 patients opted solely for alternative therapies as defined by Johnson. Such a choice clearly reduced (Continued on page 8)
Recently published results with an innovative radiation therapy (RT) technique called stereotactic body RT (SBRT), show that men with localized prostate cancer can attain better cancer control with no increase in toxicity, in a fraction of the time that it takes to receive standard RT.

For many years, a conventional RT method known as intensity modulated RT (IMRT) takes up to nine weeks to complete and has yielded good, but not excellent, cancer control rates. Other more invasive techniques, such as high-dose-rate (HDR) brachytherapy (BT), have shown better cancer control rates, but require anesthetic and bladder catheterization. This technique entails the positioning of hollow needles in the prostate and placement of radioactive material in the needles to deliver the RT. The reason that HDR BT is so effective is that prostate cancer is very sensitive to the RT dose delivered per fraction, rather than the total dose. So, a few high doses of RT with HDR BT has a greater biological effect on the prostate cancer cells.

New studies with CyberKnife System, an SBRT treatment, show excellent cancer control like what is achieved with HDR, with very low toxicity. These treatments take less than an hour and can be completed in one week (four or five sessions), as opposed to the nine weeks of standard IMRT. Treatment is non-invasive, so men are able to resume all normal activities when they leave the clinic. The CyberKnife System, manufactured by Accuray Incorporated, is a large robot with a compact linear accelerator mounted on the end of it. Before the procedure begins, four gold seeds (fiducials) are implanted in the prostate. This is done with local anesthetic to minimize discomfort. Imaging of the prostate, including CT and MRI scans, is used by the radiation oncologist to map out the target and surrounding vital organs. A high-speed computer calculates the optimal number of beams, then the robot is programmed to move to over 100 positions to cover the prostate with RT, while sparing nearby normal tissues.

During treatment, the CyberKnife System monitors seed position with X-rays at regular intervals to ensure the beams are aimed precisely at the target. If there is any movement of the prostate, for example due to bladder filling, position adjustments are made automatically in real-time throughout the procedure. Dozens of studies show that this approach causes a rapid and sustained reduction in PSA levels with side effects that are generally mild and temporary. I have personally been using this technique on men for almost 12 years. Recently, I published a paper in an online journal called Cureus. The paper reported on over 200 men treated with a dose of 36.25-35 Gy over five days. In this study, all men had a Gleason score of 6 with a PSA <10 ng/mL. These are referred to as low-risk patients. I found that 94% had complete control of their disease at 10 years as measured by their extremely low PSA readings. This is in contrast with reports of only 80-85% control at 10 years with standard nine-week IMRT. The study also showed that toxicity can be minimized by using the 35 Gy dose, which yielded slightly lower rates of urinary toxicity than with 36.25 Gy, with identical control rates. This indicates that control can be achieved with a dose that is extremely well-tolerated. Also, men with good erectile function before treatment had good preservation of function afterwards.

For men with more aggressive disease (intermediate-risk with higher PSAs and Gleason scores), CyberKnife treatment is also very effective. Dr. Robert Meier, a radiation oncologist at Swedish Medical Center in Seattle, WA, and I have separately published our results with intermediate-risk patients with up to eight-year follow-up. We have both achieved excellent control rates (92% to 95% at five years), again with low toxicity profiles. My study shows 86% control at nine years. This compares quite favorably to reports of 70-74% rates of control with standard IMRT at 10 years.

For high-risk men (those with a Gleason score of 8 or PSA levels >20 ng/mL), I reported 10-year results at the American Society of Clinical Oncology meeting last year. In a group of 100 men, half received CyberKnife as a boost after five weeks of standard IMRT and the other half received CyberKnife alone. Also, half the men received up to six months of androgen deprivation therapy (ADT). Multivariable analysis revealed that the addition of ADT did not improve the results achieved with CyberKnife alone. The biochemical control rate, measured by

(Continued on page 5)
Ten-year CyberKnife Results (Continued from page 4)

Risk-Prostate-Cancer-a-Ten-Year-Analysis

Disclaimers:
Study results are somewhat difficult to interpret and are compared with results from other unrelated studies. Long-term survival data is not currently available for men treated with CyberKnife. Other RT studies show that PSA is not a reliable predictor of long-term survival. Low-risk patients who participated in the study may have done equally well with active surveillance.

Editors Note:
Content of this article was reviewed and edited for inclusion in the Hot Sheet, but should be recognized as information provided by Accuray Incorporated about their CyberKnife treatment. Side effects of CyberKnife treatment are usually mild and temporary, may include nausea, fatigue, and skin irritation, and may vary from patient to patient. As with any RT method, the side effects can also be severe in some patients and lead to permanent injury or even death, and results may vary from patient to patient.

Higher PSA Levels Found at Metastatic Prostate Cancer Diagnosis (Continued from page 1)

from 2004 to 2014; of these, 49,586 (4.01%) were metastatic at diagnosis. PSA levels at initial cancer diagnosis were divided into four groups: 0.2-3.9, 4.0-10.0, 10.1-20 and greater than 20 ng/mL. The ratio of mPCa vs. total PCa diagnoses was compared each year by group.

The proportion of mPCa present at diagnosis increased over the 10-year period for every PSA group, with the most significant proportional increase observed in men with PSA levels greater than 20 ng/mL, from 8.5% in 2004 to 22.9% in 2014. The investigators advised that secondary observation of a proportionate increase in overall mPCa in the NCDB must be interpreted with caution, given that this is a registry rather than a population-based data set.

Behfar Ehdaei, MD, an assistant attending surgeon in the Department of Surgery and an assistant biostatistician in the Department of Epidemiology and Biostatistics at Memorial Sloan Kettering Cancer Center in New York City, discussed the study with Clinical Oncology News.

"Downstream impact of health policy decisions is always a concern, and changes in recommendations for prostate cancer screening are no exception. Although we can focus equally on positive long-term impacts from these changes, including reducing screening in older men with significant comorbidities or other life-threatening malignancies, this study from the AUA conference suggests that the proportion of metastatic disease in a specific population of men (PSA >20 ng/mL) is increasing," Dr. Ehdaei said.

“Other factors may contribute to these findings,” he added, “including changes in the definition of metastatic disease used in the registry over the period of study. Therefore, the differences in the proportion of men presenting with mPCa may represent only a different definition rather than a true change in disease biology.” In April, the USPSTF issued draft guidelines calling on clinicians to discuss benefits and risks of screening with men 55 to 69 years of age.

Clinical Oncology News 3 October 2017
High Dose Rate Brachytherapy as Monotherapy for Localised Prostate Cancer

Radiotherapy and Oncology 23 October 2017; Epub

To evaluate the oncological outcome of a three-implant high dose rate (HDR) brachytherapy (BRT) protocol as monotherapy for clinically localised prostate cancer. Between February 2008 and December 2012, 450 consecutive patients with clinically localised prostate cancer were treated with HDR monotherapy. The cohort comprised of 198 low-, 135 intermediate- and 117 high-risk patients being treated with three single-fraction implants of 11.5Gy delivered to an intraoperative real-time, transrectal ultrasound defined planning treatment volume up to a total physical dose of 34.5Gy with an inter-fractional interval of 21 days. Fifty-eight patients (12.8%) received ADT, 32 of whom were high- and 26 intermediate-risk. Biochemical failure was defined according to the Phoenix Consensus Criteria and genitourinary/gastrointestinal toxicity evaluated using the Common Toxicity Criteria for Adverse Events version 3.0. The median follow-up time was 56.3 months. The 60-month overall survival, biochemical control and metastasis-free-survival rates were 96.2%, 95.0% and 99.0%, respectively. Toxicity was scored per event with late Grade 2 and 3 genitourinary adverse events of 14.2% and 0.8%, respectively. Late Grade 2 gastrointestinal toxicity amounted 0.4% with no instances of Grade 3 or greater late adverse events to be reported. Our results confirm HDR BRT to be a safe and effective monotherapeutic treatment modality for clinically localised prostate cancer.

Cancer Can Change (Continued from page 1)

normal, it may not be.
To determine if tissue surrounding a tumor was as healthy as it looked, the researchers used data from the Cancer Genome Atlas. The atlas is a collaborative effort to collect, select and analyze tissue for genomic alterations across many cancer types. It includes information on tumor tissue as well as the adjacent tissue.
To compare tumor-surrounding tissue with healthy tissue that does not surround a tumor, the team used a database from the Genotype-Tissue Expression Project. Under this program, researchers collect tissue from the bodies of people who have died in a hospital and donated their bodies for research. The samples are taken from many parts of the body.
Although some samples are taken from people with a disease, none are taken from cancer patients.
The team compared samples of non-cancer-related healthy tissue and tissue that surrounds tumors in eight types of cancer: lung, colon, breast, uterus, liver, bladder, prostate, and thyroid.
While tumor-surrounding tissue resembled normal tissue, it was different from either non-cancer-related healthy tissue or tumor tissue. In general, the number of genes involved in inflammation increased in tumor-surrounding tissue, compared with both healthy and cancer tissue.
The team found high levels of 82 genes in tumor-adjacent tissue. They also discovered an over-active inflammatory signaling pathway in most tissue samples.
Another indication of heightened inflammation in tumor-surrounding tissue was that the team found more immune cells in it than in normal tissue. Researchers also found evidence of cancer-related stress signals in the surrounding tissue. These signals can lead to cells being deprived of oxygen and dying.
In addition, the team discovered that mature cells in some surrounding tissue had reverted to an earlier embryonic state. This change in healthy cells allows them both to proliferate and differentiate into cancer cells.
The study suggested that tumor cells affect not only their immediate environment but also more distant areas. It suggests that tumors may be instigating these inflammatory and other cancer-related processes to help the cancer grow and spread.
Besides providing scientists with new insights into tumor biology, the study should serve as a caution for researchers assuming that tissue surrounding a tumor is truly normal.

Prostate Cancer News Today
2 November 2017

This Season, Give the Gift of Hope...

Please keep a lookout for our holiday card and email which will be coming to you shortly. We want to wish everyone a great holiday season and would like to ask you to consider contributing to the Us TOO Holiday Hope campaign.

Funds raised through Holiday Hope will help Us TOO provide the prostate cancer community with educational resources and support services at no charge. Please donate to empower others with knowledge and share the light of hope.

You can donate at:
www.ustoo.org/HolidayHope2017Donate
Thank you for your support!

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www.ustoo.org/Seek-Board-Members
Doctor Chodak’s Bottom Line


Editor’s Note: Us TOO has invited certain physicians and others to provide information and commentary for the Hot SHEET to enrich its content to empower the reader. This column contains the opinions and thoughts of its author and are not necessarily those of Us TOO International.

P1, “Higher PSA Levels...”
Since the U.S. Preventive Service Task Force (USPSTF) recommendation against PSA screening for prostate cancer in 2007, has the clinical presentation at diagnosis changed? Schober, et al. addressed this question by retrospectively evaluating a large cohort of men diagnosed between 2004 and 2014. They found that the detection of metastatic disease increased in each subgroup of PSA over that period of time. Given the change in screening guidelines, there is a suggestion that more metastatic disease at diagnosis is a consequence of reduced testing. The authors urge caution in interpreting these findings, which is definitely commendable as, no doubt, some will use these data to support more aggressive screening. However, more caution is needed because there are many possible reasons for these findings. For example, we know nothing about the frequency of testing in the men who were diagnosed. It is possible that screening was being done routinely. Without knowing this information, it is impossible to determine cause and effect to a change in screening. Also of concern is the fact that, at least from the abstract, there is no comparison of the incidence of metastases at the beginning and the end of the evaluation. All we are told is that 4% had metastatic disease in the entire population. Suppose it did not change significantly. Finally, even if true, that does not provide proof that had more extensive screening been conducted, mortality would be changed in a significant way.

The Bottom Line: Neither an observed difference in metastatic rates for subgroups of PSA nor the implications can be explained at this time.

P2, “Utility of Digital...”
Should doctors perform a digital rectal exam (DRE) when screening for prostate cancer? Halpern, et al. provided some information by conducting a retrospective analysis of data from the PLCO screening trial. They assessed the frequency of higher-grade disease (Gleason 7 and higher) in men in that trial and correlated it with the DRE result. They found that for men with a PSA >3.0 ng/mL, a positive DRE was correlated with higher-grade disease, but this was not the case for men with lower PSA levels. Their conclusion is that the DRE is not worthwhile unless the PSA is greater than 3 ng/mL. Despite their findings, one may still question whether there is a value in doing the DRE at any PSA. Does it help decide whether a biopsy is necessary? That may be true in some cases, but it is far more likely that a biopsy will be recommended based on the PSA history. Will it affect the biopsy procedure? Perhaps, if the biopsy is ultrasound guided, but more likely not, if MRI is included. Also, there is a convenience issue; if a man comes in for a PSA test and the DRE is deferred until the PSA result is known, then he has to return for another visit, which is inconvenient. For now, one may conclude that routine DRE does not aid in the detection of the disease and conveys little benefit even in men with a higher PSA.

The Bottom Line: Due to changes in clinical practice, a routine DRE is no longer needed as an aid to prostate cancer screening, regardless of the PSA level.

P2, Intermittent...” Do we have a new treatment for short-term hot flashes caused by ADT? Rich, et al. provide results of a small pilot study in which they used intermittent auricular acupuncture every other week for six weeks. They report that frequency, intensity, and severity of vasomotor symptoms improved. What is needed next is both a confirmation of these findings at another institution, followed by a true randomized trial against a sham procedure. Hopefully they will be forthcoming because of the widespread debilitation that occurs with ADT.

The Bottom Line: Intermittent auricular acupuncture could prove to be a useful treatment for men with hot flashes on ADT but more studies are needed.

P6, “High Dose Rate...” What should patients be told about the relative value of high dose rate brachytherapy compared to other treatment options for local disease? Strouthos, et al. provide new data on an uncontrolled cohort of 450 consecutive men who received three courses of the intra-prostate treatment. Overall, they found a low incidence of grade 3 toxicity and excellent five-year overall survival, metastasis-free survival and biochemical-free survival. Unfortunately, their conclusion that HDR is an effective treatment for localized disease is not warranted at this time. The reasons are as follows: First, five-year overall survival, even for high-grade disease, is too short a time to compare outcomes and it is not predictive of long-term survival. Second, there is no evidence from their report that the men with low-grade disease needed to be treated. Third, 19% and 27% of the men with intermediate- and high-grade disease, respectively, received ADT and it is unclear how that impacted on the result. For now, more time is needed to assess long-term effectiveness of this therapy in men who need treatment. Sadly, a randomized trial comparing it to other options will probably never be done and it will continue to be promoted without our knowing if it is as good as other therapies.

The Bottom Line: HDR can be safely done with low-grade 3 toxicity, but it is far too early to determine how this treatment compares to other options in terms of long-term outcomes.
Electroacupuncture (Continued from page 2)

given repeated questionnaires regarding severity and frequency of hot flashes, quality of life (QoL), and sleep over a six-week span of an AEA protocol. Each subject’s heart rate variability (HRV) was obtained repeatedly every week in an ambulatory setting with a BlueCardio device (BlueCardio, Miami, FL). The AEA intervention was given with a Neurova device (Nunka Corporation, CM Wellness Clinic, Pompano Beach, FL) that used three needles at Master points Sym pathetic, Shen Men, and Point Zero, which were located precisely with a bipolar point finder. Intermittent microcurrent stimulation was given every other week for 96 hours, using a cyclic programmed output of two hours on and two hours off.

Results: Of 10 men completing the 6-week protocol, all responded with significantly lower frequency, duration, and severity of vasomotor symptoms; QoL and sleep scores improved significantly. The HRV analysis showed significantly lower low-frequency/high-frequency power ratios in each individual, compared to baseline, that were consistent with the subjective responses.

Conclusions: Vasomotor disturbance, caused by gender hormone withdrawal, either naturally or in patients treated with ADT, as in this study, is a well-defined neurophysiologic condition. This disorder is a constellation of findings that reflect autonomic disturbances of excessive sympathetic and reduced parasympathetic activity. AEA intervention with the Neurova device is simple to administer, is well-tolerated, and appears to be effective for restoring autonomic balance. Further evaluation of AEA for vasomotor disturbances could provide more insight into the mechanisms of AEA neuromodulation and potentially lead to approaches for treating not only these symptoms but also other neurologic conditions with components of autonomic disturbances.

Alternative Treatments (Continued from page 3)

the chances of survival.

“Figures show that patients who opt for alternative therapies and decline conventional treatments are 2.5 times more likely to die within five years of diagnosis,” he said. “It’s a huge reduction in the chances of survival.”

But an exception was seen among people with low- and intermediate-risk prostate cancer, whose choice of alternative therapy didn’t have any impact on survival. “This might be explained by the fact that many such prostate tumors don’t even need treatment, since they won’t cause any harm,” Johnson said.

The study also found that younger women, with overall better health and a higher income and level of education, tended to be the type of patient most likely to opt out of conventional treatments. These patients also often lived in areas of the country where legislation is more favorable toward practices offering alternative therapies, such as the West Coast.

“It’s my hope that studies like this can still reach and engage people who are unsure and seeking facts, and help them have better conversations with their doctors about their options,” he said.

Johnson’s study took 12 months to complete.

Some “alternative” therapies are known to have beneficial effects, especially if taken in addition to conventional therapy, the researcher notes. But he advises patients to search for information from reliable sources, like the Centers for Disease Control and Prevention (CDC), and to speak with their doctors regarding questions they might have.

Prostate Cancer News Today, 6 November 2017