URINE TEST MAY HELP DETECT STRATIFY PROSTATE CANCER

In men with elevated prostate specific antigen (PSA), an investigational urine test can detect and stratify prostate cancer, researchers reported.

The test is based on the detection of a gene fusion that is specific to prostate cancer, combined with another marker, according to Arul Chinnaiyan, MD, PhD, of the University of Michigan Medical School, and colleagues.

Stratifying patients by the combined marker identified groups with markedly different risks of cancer, high-grade cancer, and clinically significant cancer on biopsy, the researchers reported online in *Science Translational Medicine*. The noninvasive test could allow some men with elevated PSA to avoid a needle biopsy, the researchers noted.

The fusion at the heart of the test involves the genes transmembrane protease, serine 2 (TMPRSS2), and v-ets erythroblastosis virus E26 oncogene homolog (avian) (ERG). The fusion appears in about half of all prostate cancers, Chinnaiyan and colleagues noted, but when it appears it is almost 100% specific for malignancy.

In a series of experiments, the researchers showed that the fusion gene was associated with indicators of clinically significant cancer at biopsy and prostatectomy. The indicators included tumor (Continued on page 3)

FOR SOME PROSTATE CANCER PATIENTS COMBO TREATMENT IMPROVES SURVIVAL

For men who have prostate cancer that’s considered “intermediate risk,” radiation (RT) plus four months of androgen deprivation therapy (ADT) appears to improve survival, a new study finds. This combination of treatments, however, was not effective in men with either low-risk prostate cancer or advanced disease, the researchers said. Men with high-risk cancer need long-term hormone therapy.

The report was published online ahead of print in the July 14 issue of the *New England Journal of Medicine*.

“For patients with early, localized cancer of the prostate who were treated with RT, [by] adding short-term ADT, we improved their cure rates and increased their chance of living 10 years from 57 percent to 62 percent,” said lead researcher Dr. Christopher U. Jones, from Radiological Associates of Sacramento, CA.

But on further analysis, patients with low-risk prostate cancer did not need ADT because the chance they would survive with RT alone was already almost 99 percent, Jones said. And while short term ADT is “not very toxic, there are [still] some toxicities,” Jones noted. “We really want to make sure – if we are going to recommend that treatment – the person really needs it,” he said.

(Continued on page 5)

US TOO NAMES NEW BOARD MEMBERS FOR 2011

At their June 10-11, 2011 meeting, the Us TOO International Board of Directors approved two new Board members, James C. Hammack, DDS and Reverend Harold “Hal” Teuscher.

James C. Hammack, DDS, New Director

Jim is a general dentist in practice over 40 years in Oklahoma City. A graduate of Oklahoma State University, Jim received his Doctorate of Dental Science from Baylor College of Dentistry in Dallas, Texas. Jim was diagnosed with prostate cancer at the age of 62 in 2006 and elected to have a da Vinci robotic prostatectomy in December 2006. This

(Continued on page 3)
ROBOT TECHNOLOGY MAY DRIVE UP PROSTATE SURGERIES

After Wisconsin hospitals acquired robotic surgery technology, the number of prostate removals there doubled within three months, a new study shows. By contrast, the number of radical prostatectomies (RPs) stayed the same at hospitals that didn’t purchase the new $2-million technology.

The increase in such surgeries raises questions about whether more doctors at hospitals with robots are recommending RP for men with prostate cancer, say the authors, instead of alternative treatments like radiation or surveillance.

“Trying to be ahead of the curve is a human instinct,” said lead author Dr. Joan Neuner of the Medical College of Wisconsin, who noted that new medical technologies are often adopted quickly by hospitals, and demanded by patients. The robot costs nearly $2 million, plus more than $100,000 per year for maintenance. Hospitals that acquire it might feel pressure to cover the additional costs by performing more RPs, said Dr. Jim Hu, director of urologic robotic surgery at Brigham and Women’s Hospital in Boston, MA, who was not involved in the new study.

The new finding, reported online 29 June 2011 in the journal Cancer, comes just months after a report from Johns Hopkins showed hospital websites often hype robotic surgery, ignoring the risks and benefits. While shorter recovery times, less blood loss, and smaller scars are benefits of the robotic system, there may be additional risks. Inexperienced surgeons may make more mistakes, leading to complications, stated Dr. William See of the Medical College of Wisconsin, a co-author of the study. Additionally, robotic surgery extends operative time.

Dr. Neuner and colleagues attribute their findings in part to patient demand, driven by aggressive marketing by manufacturers and hospitals. In fact, patients often specifically request robotic surgery without knowing the risks and benefits, said Dr. Lotan. Dr. Hu said marketing may have placed too much emphasis on the robot, which may have too much influence on the decision-making process. Hospitals need to understand the risks and benefits of robotic surgery, he said.

Some advertisements have claimed that robot-assisted RP decreases the chance of impotence and incontinence, according to the earlier Hopkins report, but neither of these benefits has been scientifically proven. The robotic system gives surgeons “enhanced dexterity, precision and control,” according to the website of robotic surgery system manufacturer Intuitive Surgical. The surgeon controls the robot from a console, and the robot never acts independently.

While shorter recovery times, less blood loss, and smaller scars are benefits of the robotic system, there may be additional risks. Inexperienced surgeons may make more mistakes, leading to complications, stated Dr. William See of the Medical College of Wisconsin, a co-author of the study. Additionally, robotic surgery extends operative time.

Dr. Neuner and colleagues attribute their findings in part to patient demand, driven by aggressive marketing by manufacturers and hospitals. In fact, patients often specifically request robotic surgery without knowing the risks and benefits, said Dr. Lotan. Dr. Hu said marketing may have placed too much emphasis on the robot, which is just a tool in the hands of the surgeon. The outcome has more to do with the skill of the surgeon than the tool used, he said. “It is not the robot that provides the benefits, it’s the surgeon.”

Reuters Health, 20 July 2011
was followed by forty-four Tomo radiation treatments in 2008. He has been cancer free since treatment.

Jim and his wife, Beth, have been leaders in the central Oklahoma Us TOO Chapter since his diagnosis. As a cancer survivor, Jim has been an avid proactive speaker and participant in many prostate cancer screenings. They have three married children and four grandsons. He has been a member of the American Dental Association, Academy of General Dentistry and served as president of the Oklahoma County Dental Society.

The Rev. Hal Teuscher is a retired clergyman of the Lutheran Church-Missouri Synod, having served for 50 years in large and small parishes in Arizona, California, Michigan, Missouri, and Illinois. He possesses two Masters degrees from Concordia Seminary, St. Louis, MO, and a third Masters from Western Michigan University where he also served as an instructor in interpersonal communications and public speaking.

He worked for 15 years as a Corporate Communications and Labor Relations Specialist in the Human Resources department for a Fortune 500 Corporation, The Upjohn Company, now part of the pharmaceutical company, Pfizer Pharmaceuticals. He also served as the chairperson of his denomination’s Wellness Committees in southern California, Arizona, southern Nevada, and central Arizona.

Hal had a successful prostate cancer surgery at Mayo Clinic, Scottsdale, AZ in 2003 and has been serving as a volunteer counselor to men recently diagnosed with prostate cancer. He is actively spreading the news about Us TOO in Casa Grande, AZ where he resides with his wife Julia, who retired in 1992 as Corporate Materials Coordinator at The Upjohn Company, Kalamazoo, MI.

New Us TOO Board Members

(Continued from page 1)

Letter to the Editors

Gentlemen,

Please review and comment upon this potentially devastating release from UroToday.com (dated 15 July 2011). Does it mean we should avoid any and all vitamin D intake?

Editors’ response:

This study evaluated the possible association of prostate cancer risk with polymorphisms (mutations) in 3 genes: ER-α (PvuII, Xbal), VDR (BsmI) and CaSR (A986S) and serum calcium levels. Previous studies have shown an association between these genetic changes and the development or proliferation of prostate cancer. The authors showed that polymorphisms in both VDR BsmI genotypes and serum calcium levels were independently related to the risk of prostate cancer. Although risk of prostate cancer was “significant” statistically, the magnitude of the risk (e.g., odds ratio) is not stated and it does not provide the prevalence of these genetic polymorphisms in the group of healthy men and in those diagnosed with prostate cancer (to determine their sensitivity and specificity).

An association between prostate cancer risk and calcium intake or high serum calcium levels has been described previously although it is not clear if this association is causal or not. Genetic polymorphisms themselves are associated with many types of cancers and in some cases they can be considered diagnostic of malignancy. However, while the presence of genetic polymorphisms can increase the risk of developing certain cancers, they do not guarantee cancer will truly develop in at-risk individuals.

Us TOO wishes to reiterate what we have stated about vitamin D in the past. In last month’s HotSheet, Doc Moyad’s column stated that losing weight increased vitamin D serum levels. Last year, the researchers in the United States looked at the influence of vitamin D and calcium on prostate cancer risk in more than 3,000 men. They found that vitamin D and calcium levels were independently associated with a lower risk of prostate cancer. The researchers concluded that vitamin D is protective against prostate cancer, but it is not clear if this association is causal.

New Urine Test

(Continued from page 1)

size, high Gleason score at prostatectomy, and upgrading of Gleason grade at prostatectomy, they reported.

But because the fusion gene is not universally present, the researchers created a model that combined it and the prostate cancer antigen 3 (PCA3) gene. In 1,065 men biopsied, the researchers used the model to stratify men into three groups – lowest, intermediate, and highest levels of the combined genes.

They found that the groups had distinctly different patterns of risk. Specifically:

- 363, 346, and 356 men were in the lowest, intermediate, and highest score groups, respectively – or 34%, 32% and 33%.
- Cancer was diagnosed in 21%, 43%, and 69% of men in the lowest, intermediate, and highest groups, respectively. Difference between low and high groups was significant (P<0.001).
- Biopsy Gleason score cancer was found in 67%, 20%, and 40% of men in the lowest, intermediate, and highest groups, respectively. Difference between the low and high groups was significant at P<0.001.
- Of the 966 men with enough information to determine the significance of cancer, 15%, 33%, and 61% of men had Epstein-criteria-defined significant cancer, respectively.

The researchers cautioned that the test remains investigational. Also, most of the men studied so far have been Caucasian, so that additional study is needed to see if the results apply more broadly.

In an interview with HealthDay News, Dr. Anthony D’Amico, chief of radiation oncology at Brigham and Women’s Hospital in Boston, said the test is “a step forward, but we still have a ways to go.” “On average the risk is higher in people with both markers and lowest in people who have neither, but that’s on average” D’Amico said.

If a patient has indications of an aggressive prostate cancer, the test can add more to that diagnosis, D’Amico said. But for men who potentially have cancer, a low-risk determination based on this test shouldn’t preclude biopsy, he added.

MedPage Today, 3 August 2011
NEW INFORMATION GUIDE FOR PROSTATE CANCER PATIENTS

CyberKnife® Robotic Radiosurgery: A Treatment Option for Prostate Cancer

The CyberKnife Robotic Radiosurgery System is a non-invasive treatment option for prostate cancer that has the ability to deliver targeted and destructive doses of radiation with the highest levels of accuracy, even for tumors close to critical structures and healthy tissue.

Now available for download is a comprehensive information guide on the CyberKnife System that addresses what every newly diagnosed prostate cancer patient wants to know about treatment with the CyberKnife System.

The guide includes information on the CyberKnife System’s capabilities and differentiators from other forms of radiation therapy and its unique ability to track and automatically correct for the unpredictable movement of the prostate during treatment. This capability can minimize many side effects typically associated with other treatment options and preserve patient’s quality of life.

Within the guide are real life stories from patients that have been treated with the CyberKnife System who describe their experiences as pain-free, short outpatient procedures (completed in five or fewer treatment sessions) that allowed them to more quickly return to their daily lives.

FDA cleared in 2001 to treat tumors throughout the body, there are numerous published studies on the safety and efficacy of the CyberKnife System for the treatment of cancers throughout the body, including published five-year milestone data on prostate cancer.

Ideal patients for CyberKnife treatment typically fall into low to intermediate risk categories; patients with more advanced prostate cancer may qualify as well. All patients should consult their physicians for information regarding their specific treatment plans.


Accuray Incorporated, 10 August 2011

AGE-ADJUSTED VALIDATION OF THE MOST STRINGENT CRITERIA FOR ACTIVE SURVEILLANCE IN LOW-RISK PROSTATE CANCER PATIENTS

Suardi N, Gallina A, Capitanio U, et al

Cancer, published online ahead of print, 12 July 2011

Background: The authors tested the performance of the currently used clinical criteria reported in populations studied by van den Bergh et al and Carter et al for the selection of patients with prostate cancer for active surveillance (AS) according to age.

Methods: Data were analyzed from 893 patients who underwent with radical prostatectomy (RP). The authors investigated the rates of unfavorable prostate cancer at RP (extracapsular extension, seminal vesicle or lymph node invasion, or Gleason score 7-10) in patients who fulfilled AS criteria according to age tertiles (ages ≤63 years, 63.1 to 69 years, and >69 years). Area under the plasma concentration time curve (AUC) analyses tested the criteria for predicting unfavorable prostate cancer. Then, the patients were stratified according to the cutoff age of 70 years. Multivariate analyses were used to test the role of age in predicting unfavorable prostate cancer.

Results: The rate of unfavorable prostate cancer characteristics was between 24% and 27.8%. In the van den Bergh et al population, after age 70 years, the rate of unfavorable prostate cancer characteristics was 41% compared with 23.2% and 24.1% in patients in the previous age tertiles (ages ≤63 years and 63.1 to 69 years, respectively). In the Carter et al population, the rate of unfavorable prostate cancer was 41.2% compared with 17.3% and 18.6% in the previous age tertiles (ages ≤63 years and 63.1 to 69 years, respectively). When the 70-year age cutoff was used, unfavorable prostate cancer was identified in 17.9% to 23.6% of patients aged <70 years versus 4% to 41.2% of patients aged >70 years (all P <0.001). AUC analyses revealed significantly lower performance in older patients. Multivariate analyses, after adjustment for PSA, prostate volume and the number of cores, age represented an independent predictor of unfavorable prostate cancer.

Conclusions: The currently used AS criteria performed significantly better for patients aged <70 years. The authors concluded that the current results should be taken into account when deciding whether to offer AS to patients with low-risk prostate cancer.

ANDROGEN DEPRIVATION THERAPY INFLUENCES THE UPTAKE OF ¹¹C-CHOLINE IN PATIENTS WITH RECURRENT PROSTATE CANCER: THE PRELIMINARY RESULTS OF A SEQUENTIAL PET/CT STUDY

Fuccio C, Schiavina R, Castellucci P, et al

Eur J Nucl Med Mol Imaging; Epub ahead of print, 6 July 2011

Purpose: The influence of androgen deprivation therapy (ADT) on ¹¹C-choline uptake in patients with prostate cancer (PC) has not yet been clarified. The aim of our study was to investigate this issue by means of sequential ¹¹C-choline positron emission tomography (PET/CT in patients with recurrent PC.

Methods: We retrospectively studied 14 recurrent PC patients (mean age 67 years, range 55–82) during follow-up after radical prostatectomy (RP) with rising serum prostate-specific antigen (PSA) levels. All patients had undergone at least two consecutive ¹¹C-choline PET/CT scans: the first ¹¹C-choline PET/CT before commencing ADT and the second ¹¹C-choline PET/CT after 6 months of ADT administration.

Results: The mean serum PSA level before ADT was 17.0 ±44.1 ng/ml. After 6 months of ADT administration the PSA value significantly decreased in comparison to baseline (PSA = 2.4 ±3.1 ng/ml, p < .025). Moreover, before starting ADT, 13 of 14 patients had positive ¹¹C-choline PET/CT for metastatic spread, while after 6 months of ADT administration in 9 of 14 patients ¹¹C-choline PET/CT became negative.

Conclusion: These preliminary results suggest that ADT significantly reduces ¹¹C-choline uptake in androgen-sensitive PC patients.
PHASE II STUDY OF ABIRATERONE ACETATE IN CHEMOTHERAPY-NAIVE METASTATIC CASTRATION-RESISTANT PROSTATE CANCER DISPLAYING BONE FLARE DISCORDANT WITH SEROLOGIC RESPONSE

Ryan CJ, Shah S, Efstathiou E, et al
Clin Cancer Res 17: 1-8, 2011

Purpose: Abiraterone is an oral inhibitor of CYP17, which is essential for androgen biosynthesis. This multicenter study assessed its efficacy in patients with castration-resistant prostate cancer (CRPC), without prior chemotherapy or CYP17-targeted therapy, and frequency of bone scans discordant with prostate-specific antigen (PSA) and clinical response.

Experimental Design: Thirty-three patients received abiraterone acetate 1,000 mg daily with prednisone 5 mg twice daily in continuous 28-day cycles. Patients were evaluated monthly for efficacy and safety. Bone scan flare was defined as the combination, after 3 months of therapy, of an interpreting radiologist’s report indicating “disease progression” in context of a 50% or more decline in PSA level, with scan improvement or stability 3 months later.

Results: A 50% or more decline in PSA level at week 12 was confirmed in 22 of 33 (67%) patients. Declines in PSA level of 50% or more were seen in 26 of 33 (79%) patients. Undetectable PSA levels (≤0.1 ng/mL) occurred in 2 patients. Median time on therapy and time to PSA progression were 63 weeks and 16.3 months, respectively. Twenty-three patients were evaluable for bone scan flare. Progression was indicated in radiologist’s report in 12 of 23 (52%), and 11 of 12 subsequently showed improvement or stability. As prospectively defined, bone scan flare was observed in 11 of 23 (48%) evaluable patients or 11 of 33 (33%) enrolled patients. Adverse events were typically grade 1/2 and consistent with prior published abiraterone reports.

Conclusion: Clinical responses to abiraterone plus prednisone were frequent and durable in men with metastatic CRPC. Further investigation is needed to clarify the confounding effect of bone scan flare on patient management and interpretation of results.

COMBO TREATMENT CAN IMPROVE SURVIVAL IN SOME PATIENTS

(Continued from page 1)

On the other hand, ADT plus RT was most effective in patients with intermediate-risk prostate cancer – decreasing the risk of dying from prostate cancer at 10 years from 10 percent to 3 percent. “For patients with high-risk prostate cancer, using ADT for just a short while is not effective, Jones said. “We know from other studies that short-term ADT isn’t enough. You need to give long-term ADT in addition to RT to have the best results,” he added.

For the study, Jones’ team randomly assigned ~ 2,000 men with prostate cancer to RT alone or combined with four months of ADT. ADT side effects in men can include impotence, loss of sex drive, hot flashes, growth of breast tissue, loss of muscle and bone mass, weight gain, fatigue and mental changes. In this study, men treated with ADT experienced a much higher percentage of liver damage; toxic effects of RT were similar in both groups. Over an average of over nine years of follow-up, the researchers found that 62 percent of the men who had combination therapy were alive, compared with 57 percent of the men who received RT alone. Overall, ADT reduced the risk of dying from prostate cancer over 10 years from 8 percent to 4 percent, Jones said.

He noted that RT in use today differs from that given in 1994 when the trial began. “We can give 15 to 20 percent higher doses of RT now than we could then, and we can do it more safely and more accurately,” he said.

“This study, in conjunction with what we know about ADT, really nails home the conclusion that ADT should not be used in men with low-risk disease because the risks outweigh any conceivable benefit,” commented Dr. Anthony D’Amico, chief of radiation oncology at Brigham and Women’s Hospital in Boston and author of an accompanying journal editorial. D’Amico noted that modern studies using high-dose RT also found that the addition of short-term ADT improved outcomes at five years for men with intermediate risk prostate cancer, compared with RT alone.

These findings are good news for some men, since the effects of short term ADT are reversible, D’Amico said. “It’s not three years, where men are changed forever,” he said.

HealthDay News, 13 July 2011

RECENT ADDITIONS TO US TOO WEBSITE

- Things to do to commemorate September Prostate Cancer Awareness Month
- Active Surveillance and CyberKnife added to Treatment Options page
- Us TOO makes list of Top 10 Health Charities
- New IMAAGEN: Impact of Abiraterone Acetate trial added to highlighted trials and studies page
- Us TOO is a founder of World Wide Prostate Cancer Coalition (WWPCC)
- Links added to Agent Orange and Department of Defense (DOD) Prostate Cancer Research Program (PCRP) “PCRP Perspectives” newsletters
- Read the new monthly letter from Us TOO President & CEO Tom Kirk
- Read the current and archive issues of the HotSheet & the Us TOO Chapter NEWS... in color!
Editors’ note: In the spirit of information sharing, we have invited certain physicians and others to provide comments and opinions for Us TOO’s HotSheet. It is our desire to enrich the content of the HotSheet to empower the reader. The columns by Drs. Chodak, Moyad and Myers contain the opinions and thoughts of their author and is not necessarily those of Us TOO International.

**ASK DOCTOR SNUFFY MYERS**

If a patient’s PSA was kept in check via hormone therapy for several years, but now has gone up to 100 (androgen independent tumor now), would you prefer as your 1st line of defense abiraterone (Zytiga®), sipuleucel-T (Provenge®), or docetaxel (Taxotere®)? (The patient is asymptomatic.)

Well, first of all, you and I do not have a choice in this matter. At this point, Zytiga and Provenge are approved for treatment AFTER Taxotere. In practice, this means no insurance coverage for either drug before Taxotere. Both are expensive enough that it would be a rare patient able to pay for either drug out of pocket. Thus, it is common practice to treat with Taxotere when a patient is considered to have castration-resistant prostate cancer (CRPC). Some physicians will withhold treatment until the patient has cancer-related symptoms. The problem with this approach is that many men can develop massive amounts of cancer without symptoms. Against a large tumor volume, Taxotere only works for a short period of time used, so this amounts to being the same as no treatment. A more promising approach is to start Taxotere when metastatic cancer is detected and this would most often be bone metastases. Since bone metastases are painless in about half the patients, this means starting Taxotere in asymptomatic patients.

At AIDP we take a different tact. Most patients who arrive at our clinic regarded as having CRPC do not have hormone-resistant disease. First, some of these men do not have castrate testosterone levels and will respond if testosterone is fully suppressed. Even when the cancer is growing in the face of a castrate testosterone, its growth and survival still depends on androgens – the cancer has simply become more efficient in using whatever testosterone and/or dihydrotestosterone is available. For this reason, the patient should be given a trial of an antiandrogen, i.e., flutamide (Eulexin®), bicalutamide (Casodex®) or nilutamide (Niladron®) if he has not received them before. We usually start with Casodex,

**DOC MOYAD’S WHAT WORKS & WHAT IS WORTHLESS COLUMN, ALSO KNOWN AS “NO BOGUS SCIENCE” COLUMN**

“Some vegetables may reduce the risk of prostate cancer returning after treatment?! What is the catch…apart from reducing my risk of heart disease & getting a free Moyad family Salad Recipe?”

Mark A. Moyad, MD, MPH
University of Michigan Medical Center, Department of Urology

**Bottom Line:** Research from Harvard & UCSF shows that cruciferous vegetables consumption could potentially reduce the risk of prostate cancer returning after treatment, and if these veggies do not help with that…well at least they are heart healthy and could still help you live longer (see Moyad Free recipe below).

Your parents were definitely right about that one thing when you were a kid! Well, maybe your mom was right! I am not talking about that thing where you might go blind if you do that thing to yourself too often (think about this joke for a second pretty funny when you get it). I am talking about having to eat your vegetables before you leave the dinner table. This turns out to be brilliant advice! What do the following vegetables have in common: broccoli, Brussels sprouts, cabbage/coleslaw, cauliflower, kale, mustard, and chard greens? They belong to the cruciferous family of vegetables that are low in calories, high in healthy nutrients and potential anticancer agents.

A paper published online last month studied a total of 1,560 men diagnosed with non-metastatic prostate cancer taken from a famous US database (known as CaPSURE – 40 sites, mostly community-based clinics). During follow-up, 134 men in this group experienced prostate cancer progression, mostly after cancer treatment. Men that reported a regular (about once a day) intake of cruciferous vegetables had a significant 59% reduction in risk of cancer returning compared to men that occasionally consumed these veggies. However, men that ate more total veggies overall (5-6 servings a day, any kind of veggies) also had a reduced risk of recurrence (albeit non-significant). Also, men that ate more veggies appeared to be more physically active and have low or normal body weight. In other words, the more men eat veggies the more it is associated with living a healthier lifestyle.

So, is the reduced risk of cancer due to the cruciferous veggies, veggies overall, or something else? WHO CARES!!! The bottom line is that consuming more veggies daily is part of an overall heart healthy lifestyle plan and in general what is heart healthy=prostate healthy my friends! I have to go now because I am hungry for some of my wife’s (Mia), and daughter’s (Holly) famous homemade kale salad (no kidding-family favorite).

**Recipe for Mia/Holly Moyad Kale Salad:**

FINELY chop kale with some dried cherries, fresh lemon juice, olive oil, sea salt, pepper and Cannellini beans (can be stored in the fridge for 3-4 days). Add a dash of Sriracha sauce if you like it spicy! Dang – that is some good stuff, and kale (with lutein/zeaxanthin) is good for your eyesight unlike that other thing we discussed earlier in the column! The beans help you get more reading done, cherries are for arthritis, lemon juice is to prevent kidney stones, olive oil is for your heart…blah, blah, blah…just taste it already… it is good!

**Reference:**
Richman EL, Carroll PR, Chan JM. Int J Cancer, published online ahead of print 5 August 2011
a1p1c1 Extensive work is being done to improve the information we give to patients about their odds of having cancer, their odds of needing treatment and their odds that treatment will help them. The latest report tested markers for their ability to help diagnose prostate cancer in men scheduled for a biopsy and predict the odds of having a low risk cancer. The authors from the University of Michigan used a combination of a fusion gene and PCA 3. Using the two enabled patients to be divided into three groups; those having a low, intermediate, or high risk of prostate cancer. Although significant differences were found, the problem is that it still leaves considerable uncertainty about whether to do or not do a biopsy. The test could be helpful in two ways. First, by telling a man scheduled for a biopsy that his risk is so low that a biopsy could be avoided. However, even in men with lowest levels, 20% still had a positive biopsy. So would having an 80% chance of a negative biopsy be enough for a man to not have the biopsy? That is hardly much better than a 75% chance of a negative biopsy for a PSA between 4 and 10 ng/mL. So for now, the work is interesting but is a long way off from being able to tell which men really do not need a biopsy. The second question is to decide on treatment. In the lowest risk group only 7% had a Gleason score >6. Does that mean they could avoid treatment? Even men with a greater chance of having a Gleason score >6 still does not mean all those men are at risk of suffering from their disease.

THE BOTTOM LINE: The authors acknowledge that this work is still experimental, but it would appear that it does not offer the kind of information that men are looking for at this time.

a2p1c2 Yet another well-done study has been reported demonstrating the benefit of combining androgen deprivation therapy (ADT) with external radiation (RT). A randomized study was done in men having RT to test whether 4 months of ADT helped improve the results. The ten-year results found that men getting ADT were less likely to die of their disease. Overall survival was 5% higher at 9 years, which means one out of every 20 men getting ADT was better off. About 25 men had to be treated to prevent one man of dying from prostate cancer. The good news, however, is that men with low risk disease can avoid this combination treatment because it did not help their survival at all. The main benefit is restricted to men with intermediate risk cancer. Those with high-risk cancer need a much longer duration of ADT to benefit. Since the study was done using older RT approaches, a question remains as to whether the same benefit will occur using current (higher dose) RT methods.

THE BOTTOM LINE: Men with intermediate risk disease who choose external RT have a lower chance of dying by getting four months of ADT.

a4p1c2 Robot assisted radical prostatectomy (RP) has been in use for about ten years in the US. Billboards, websites and other advertising has promoted this method as offering better outcomes even though no study has yet shown that to be true. Impotence and incontinence rates are no different compared to open RP. And yet, having a robotic instrument does help increase the volume of cases done at a hospital. A study done in Wisconsin found that introducing robotic instruments significantly increased the number of men undergoing RP. It’s no surprise that the stock of the company that makes the device has risen so high. Too bad I neglected to buy it years ago!

THE BOTTOM LINE: Although most RPs done in the US are performed using the robot, the fact remains that the experience of the surgeon is the most important factor in the results of RP, not the method used. Patients should inquire about the results and number of cases done by their surgeon and also consider a second opinion with someone who has a large experience with the operation.

a6p4c1 Another treatment getting considerable hype is RT using the CyberKnife system. The appeal is obvious; men can be treated in about one week compared to the normal 6-8 weeks for IMRT. The article in this HOTSHHEET refers to a manual men can view about the treatment. It states that the results are comparable to other treatments at 5 years. Without being overly negative, I am concerned about the lack of adequate information at this time. A recent study (see video at <www.medscape.com/viewarticle/737585>) reported 5 year results in only 41 men without discussing or assessing sexual dysfunction. They reported their PSA failure rates. Unfortunately, PSA is not a reliable predictor of long-term outcomes. Another recent radiation study found that two treatments had similar 5-year PSA results but significantly different survival results. No one promoting CyberKnife acknowledges this limitation at this time or cautions men that too little is known about its long-term effectiveness.

THE BOTTOM LINE: Although the CyberKnife system may one day offer a true advantage for men getting RT, at this time, patients should be cautious and concerned that it is still too early to tell if this approach is as safe and effective vs. other therapies for this disease.

a7p4c2 Active surveillance (AS) is getting increased scrutiny around the world. A persistent question is how to determine which men need to discontinue that approach and receive definitive treatment. One recent study questioned whether age should be a greater determinant in choosing this management. RP outcomes were analyzed in men to see what criteria pre-RP would identify men best suited for AS. Men over 70 were more likely to have unfavorable pathology compared to younger men. They concluded that age should be used as part of the decision to put a man on AS.

THE BOTTOM LINE: This type of study does not really help decide about appropriate indications for conservative therapy because it says nothing about what would have happened to those men if surgery had not been done.

a9p5c1 The final study has important implications for men with advanced prostate cancer receiving abiraterone. Although it is only approved for men after docetaxel treatment, an ongoing study is testing the drug prior to chemotherapy. The authors reported that many men have worsening on their bone scans despite enjoying a PSA response.

THE BOTTOM LINE: This finding may be important for men receiving this treatment and may mean bone scans should be delayed and only obtained in men whose PSA rises on abiraterone.
year, he also advised patients that taking more vitamin D is not better. Doc Mo-yad’s conclusions from the published vitamin D literature match those of the authors of a recent review article.

In that paper, the authors recommended minimum vitamin D supplementation of 600 IU per day for the average patient with prostate cancer. They also recommend serum testing of vitamin D at baseline to determine if levels indicate a deficiency (<20 ng/mL), wherein which higher supplementation is reasonable.

Us TOO has continued to be conservative with regards to our calcium and vitamin D recommendations. Therefore, we do not believe this study’s results indicate that patients should avoid taking vitamin D. Vitamin D has other benefits in addition to bone health that include but are not limited to muscle strength, balance and immune function.

Reference

and when this fails switch to nilutamide and then to flutamide, each of which can offer a 20% response rate. If the patient is already on one of these antiandrogens, there is a 20-30% chance that he will respond to withdrawal of antiandrogen therapy.

When disease progresses following antiandrogen withdrawal, switching to ketoconazole and estrogen can both be effective. Another form of hormonal therapy, but one that stimulates immune response is granulocyte-macrophage colony-stimulating factor (GM-CSF, Leukine®). In our clinic, we see a 70-80% response rate to the combination of Leukine and ketoconazole with or without estradiol, which is consistent with the findings of Dr. Eric Small. Estradiol skin patches can be quite useful by themselves and this probably is the least toxic form of hormonal therapy I know of.

If Zytiga were approved and paid for by the insurance companies, it would likely see use in most patients prior to Taxotere. With all of these options available, we rarely start a patient on Taxotere after Lupron or other LHRH agonists fail.