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Us TOO[®]
PROSTATE CANCER
EDUCATION & SUPPORT

HOT SHEET

MARCH 2004

MOST MEN OVER 40 TAKE STEPS TO TRY TO PREVENT PROSTATE CANCER

A new survey by researchers at Jefferson's Kimmel Cancer Center shows that most men over 40 attempt to protect themselves against prostate cancer. The steps they take range from prostate cancer screening to exercising, taking supplements and stopping smoking.

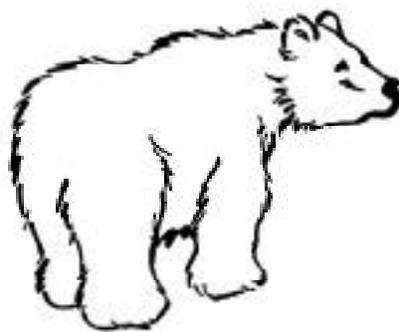
"Surprisingly, when asked, most men say they are doing something to protect themselves," says Ronald E. Myers, Ph.D., professor of medicine at Jefferson Medical College of Thomas Jefferson University in Philadelphia. "The presumption is, most men don't think about prostate cancer until they have problems, and if they do think about it, they don't do anything. These results indicate that this doesn't seem to be the case."

The researchers also found that men who said they had been screened were more likely to be more highly educated, better off financially, and believed that screening was an effective and convenient tool to prevent prostate cancer.

"This the first time anyone has reported what men do to protect themselves against prostate cancer,"

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Polar Plunge



On January 24th the Watertown (SD) Christian Businessmen group and Us TOO Watertown sponsored a 'Polar Plunge' - a day of fundraising activities to help purchase a new biopsy machine for their local hospital. As you can see from the photos on Page 4 this event was only for the truly warm-hearted.

NEW GUIDELINES FOR DRUG STUDIES FOR RELAPSED PROSTATE CANCER PATIENTS: NATIONAL WORKING GROUP RECOMMENDS EFFICACY BE PROVEN BEFORE TRIAL PROGRESSES

An abnormal or rising prostate specific antigen (PSA) blood test is often the first indication that a man may have prostate cancer. Even after diagnosis, the test continues to play a role in monitoring disease progression and assessing treatment outcomes. However, after a man has received curative therapy, there is uncertainty about what the PSA measurement means since the relationship of tumor mass and PSA value is less established at this time.

In an effort to resolve some of the treatment issues for the approximately 50,000 prostate cancer patients who will relapse each year, a national working group was organized by investigators from Memorial Sloan-Kettering Cancer Center, the National Cancer Institute, and the Prostate Cancer Foundation. The group has developed guidelines to define which patients should participate in a clinical trial and what compounds are appropriate for these

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Us TOO PUBLICATIONS

In addition to the Hot Sheet, *Us TOO* also publishes a FREE e-mail based news service providing updates on the latest prostate cancer related news. To subscribe or link to the archives simply visit the *Us TOO* Website: www.ustoo.org

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AGENT ORANGE LINKED TO CANCER RISK

A study has found an increased risk of prostate cancer and melanoma among Air Force veterans of the Vietnam War who sprayed the chemical defoliant Agent Orange, the Air Force said Thursday.

The cancer incidence was found to be 1.46 to 2.33 times higher than among the national population.

An analysis of the study is to be published in the February edition of the Journal of Occupational and Environmental Medicine. The Air Force released a synopsis of the article, which was written by members of an Air Force group that has been studying the Agent Orange matter for more than 20 years.

Betty Anne Mauger, an Air Force spokeswoman, said the Air Force did not plan to release the study or the article before publication.

The study is to be reviewed by the National Academy of Sciences, which will report its results to the Veterans Affairs Department.

From 1962 to 1971, the Air Force sprayed an estimated 11 million gallons of defoliants, mainly Agent Orange, over Vietnam to destroy jungle cover for communist troops in a campaign known as Operation Ranch Hand.

American veterans and many Vietnamese have blamed a variety of illnesses, including birth defects, cancers and nervous disorders, on exposure to the defoliant.

Vietnam's government says about 1 million Vietnamese are victims of Agent Orange, including veterans, civilians living in affected areas and their descendants. The U.S. government maintains there is no proven direct link between dioxin and many of those illnesses.

Since it began health examinations of veterans in 1982, the Air Force has studied the issue of whether long-term health damage to Ranch Hand flyers and ground crews can be attributed to Agent Orange.

HENRY FORD RESEARCHER RECEIVES \$9 MILLION GRANT TO LAUNCH GENE THERAPY TRIALS FOR PROSTATE CANCER

A Henry Ford Hospital researcher has been awarded a \$9 million grant by the National Institutes of Health to study the effectiveness of gene therapy as a treatment for prostate cancer.

The treatment, developed over the last few years by Svend Freytag, Ph.D., division head of Radiation Oncology at Henry Ford, is a new approach that uses gene therapy to enhance the effectiveness of radiation therapy.

"I believe this research will eventually yield high cure rates for prostate cancer and possibly other forms of cancer as well," says Dr. Freytag.

Later this year a clinical trial will begin involving 130 patients. In one group, 65 patients will be treated with gene and radiation therapy; the other 65 patients will be treated with only radiation therapy.

This is encouraging news for men who suffer from this disease. According to the American Cancer Society, nearly 200,000 men in the United States will be newly diagnosed with prostate cancer and 40,000 men will die from it in 2004. It is the second-leading cause of cancer death in men, after lung cancer.

The two methods that are currently used to treat prostate cancer are radiation therapy and surgery. Radiation therapy has proven to be only partially effective and surgery must be done delicately due to the intricate network of blood vessels in the area surrounding the prostate.

In the new approach, a replication-competent virus (the one associated with the common cold) developed by Freytag and his team is used to carry therapeutic genes to cancer cells. The virus attacks the cancerous cells, but leaves normal ones undamaged.

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When combined with the gene therapy, the effect is enhanced, rendering the malignant cells sensitive to radiation therapy.

In earlier trials at Henry Ford, which were intended to test the safety of the approach, the initial results were encouraging and are the main reason funding was awarded for additional research.

A previous study, published last year in the November edition of *Cancer Research*, showed that patients experienced no significant side effects when treated with gene therapy and radiation therapy. It also found that the treatment lowered patients' prostate-specific antigen (PSA) and eliminated the cancer in many of them.

PSA is a protein produced by the prostate. By measuring its level, doctors can monitor prostate cancer growth as well as the effectiveness of standard and investigational treatments.

All 15 patients enrolled in the study experienced significant declines in their PSA — from an average PSA score of 12 to below one — and 10 patients were cancer-free after one year. The patients had an aggressive form of prostate cancer that, if treated with standard radiation therapy alone, would likely recur and possibly spread.

“The goal is to develop better, newer approaches to conventional forms of treatment and test them in clinical trials,” says Dr. Freytag.

**SCIENTISTS DEVELOP
CANCER-FIGHTING
PLANT**

Purdue University scientists said Thursday they have successfully engineered a plant that could be used to produce anti-cancer nutrition supplements.

The plant, which was given a gene that allows it to tolerate the selenium, also could be used to remove excess amounts of the mineral from agricultural fields.

Interest in selenium-tolerating plants arose because studies showed selenium can reduce the risk of prostate cancer by as much as 60 percent, the scientists said.

Selenium, a mineral occurring naturally in soils in some parts of the world, is an essential nutrient for animals, including humans — but in tiny amounts. It is toxic to all animals and most plants at high levels.

The scientists inserted a gene into *Arabidopsis thaliana*, a model lab plant that normally does not tolerate selenium. The modified plant not only thrives in a selenium-rich environment, they said, but also can absorb high levels of a compound known as MSC in its tissues.

Lab studies have shown MSC to a safe and effective selenium-containing compound that reduces cancer risk in animals, making it an attractive prospect for eventual use in human nutritional supplements.

**NEW YORK PROSTATE
INSTITUTE LAUNCHES
WEBSITE TO PROVIDE
EDUCATION FOR
PROSTATE CANCER
PATIENTS**

The New York Prostate Institute today launched www.nyprostate.org, a website to provide prostate cancer patients with easy-to-understand information exploring their various treatment options. The Institute, located in South Nassau Communities Hospital, opened recently to provide East-coast prostate cancer patients with less invasive alternatives to radical prostatectomy and access to national research protocols of treatment options.

“Patients are confused, and we want to help them make an informed decision without the hype,” said Louis Potters, M.D., medical director of the Institute. “The data is evenly split between surgery and brachytherapy; depending on the patient’s individual circumstances, hormone therapy, external beam

radiation, and watchful waiting also may be appropriate options,” he said. The website walks patients through the information they will need to evaluate which choice is optimal for themselves.

A section of the website, geared to physicians, provides the latest medical thinking on prostate cancer treatment protocols. It includes patient-care data, nomograms to help physicians choose the most efficacious treatment protocol for each patient, and information about training opportunities.

Dr. Potters founded the Institute in October 2003 after a six-year appointment at Memorial Sloan-Kettering Cancer Center, where he was chief of Radiation Oncology. His vision for The New York Prostate Institute is as a center of excellence where patients receive first-line treatment or second opinions, where physicians learn to perform brachytherapy, and where the brachytherapy technique is advanced. Brachytherapy involves the implantation of radioactive seeds directly into the prostate gland.

**PROSTATE CANCER
TREATMENT INCREASES
OSTEOPOROSIS RISK**

Men taking hormones to control prostate cancer need to be monitored and treated for osteoporosis, a new study says.

Although osteoporosis is most often associated with postmenopausal women, men also lose bone density as they age. And for men with prostate cancer, one of the most common therapies can speed up bone mineral loss and lead to osteoporosis and bone fractures, the new research confirms.

Prostate cancer is the most common cancer in men, and hormone therapy is a very important risk factor for developing osteoporosis, says lead researcher Dr. Terrence H. Diamond, an associate professor of medicine at the University of New South Wales in Australia.

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Polar Plunge

fireworks display and of course a 'dip' into the frigid lake. Brings a new meaning to cryotherapy!!!

On January 24th dozens of brave souls ventured out onto frozen Lake Kampeska in Watertown, SD to help raise money for a new biopsy machine for their local hospital. More than \$7,500 was

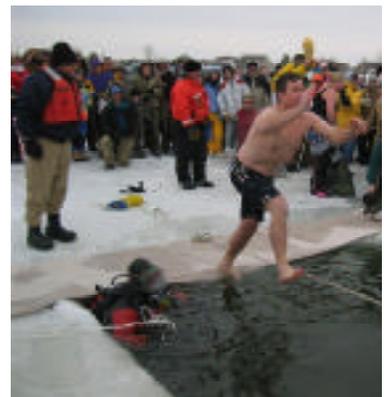
raised from the 'Polar Plunge' which included a Chili Feed, Snolf Tournament (golf in the snow!),

CONGRATULATIONS

to all those brave enough to participate - or even stand outside and watch!! Prostate cancer patients will be well served because of your efforts!



Clockwise from top left: EMS crew uses a 4 foot chainsaw to cut through the ice; then begin pulling chunk of ice from the plunge site; emergency crews stand by as the splash from the first participant signals the start of the plunge; three participants brave the frigid temps to help raise funds for a new biopsy machine; plungers warm up in a nearby hot tub after their arctic adventure!



EACH PROSTATE BIOPSY CORE SHOULD BE ASSIGNED A SEPARATE GLEASON SCORE

Study compares Gleason scores determined on needle biopsy with the grade and stage determined at radical prostatectomy.

"If multiple biopsy cores contain prostate cancer with differing Gleason scores, should an overall Gleason score be assigned, or should each core be graded separately?" researchers in the United States report.

"We obtained data on 127 men with prostate cancer on needle biopsy who underwent subsequent radical prostatectomy at our institution. We compared the Gleason scores found on needle biopsy with the grade and stage (organ-confined, extraprostatic extension, positive seminal vesicles or lymph nodes) at radical prostatectomy," wrote G.M. Kunz and colleagues, Johns Hopkins University Hospital, Department of Pathology.

"On biopsy, 40 men had a pure Gleason score of 4+3=7, 25 men had a Gleason score of 4+3=7 with a Gleason score of 3+3=6 on a separate core of the biopsy specimen, 27 men had a pure Gleason score of 4+4=8, and 35 men had a Gleason score of 4+4=8 with separate cores containing Gleason pattern grade 3," the researchers wrote.

"A Gleason score of 4+4=8 with pattern grade 3 in other cores had a more advanced stage than a pure Gleason score of 4+3=7 (p=.008). There was no clear pattern analyzing pathological stage of men with a pure Gleason score of 4+3=7 in comparison with those with Gleason scores of 4+3=7 and 3+3=6 in other cores," the researchers stated.

"The group with a Gleason score of 4+4=8 and Gleason pattern grade 3 on other cores had a higher overall grade on radical prostatectomy than the group with a pure Gleason score of 4+3=7 (p=.001). If one had assigned an overall Gleason score, then a biopsy with Gleason score 4+4=8 on 1 or more cores and some pattern grade 3 in other cores, would be designated as a Gleason score of 4+3=7," they added.

"Based on our findings, patients with a Gleason score of 4+4=8 on one or more cores with pattern grade 3 in other cores should be given a final Gleason score of 4+4=8 instead of 4+3=7, because these patients are more likely to have higher stage and grade on radical prostatectomy, comparable to a pure Gleason score of 4+4=8. Each core should be assigned a separate Gleason score, especially in cases with high Gleason score cancer on at least 1 core," the researchers concluded.

Kunz and colleagues published their study in *Human Pathology* (Should each core with prostate cancer be assigned a separate Gleason score? *Hum Pathol*, 2003;34(9):911-914).

MAXIMUM TUMOR DIAMETER IS A PREDICTOR OF TUMOR VOLUME

Study finds that maximum tumor diameter is a predictor of tumor volume and might be useful in determining the tumor volume in routinely processed prostatectomy specimens.

"Tumor volume has prognostic value in numerous malignant neoplasms; however, the determination of tumor volume in prostatic adenocarcinoma remains problematic. We tested the hypothesis that the diameter of the largest focus of carcinoma in whole-mount prostate sections predicts the volume of adenocarcinoma in the entire prostate," researchers in the United States report.

"We evaluated 184 radical prostatectomy specimens by whole-mount processing of the entire prostate. The maximum diameter of the largest focus of carcinoma was measured directly on glass slides. Tumor volume in the entire prostate was calculated by the grid method," wrote L.E. Eichelberger and colleagues, Indiana University Medical Center.

"The maximum tumor diameter ranged from 0.1 to 4.1 cm (median, 1.6 cm). The total tumor volume ranged from 0.1 to 12.5 cm³ (median, 1.6 cm³). There were significant correlations between maximum tumor diameter and

tumor volume (Spearman correlation coefficient = 0.84; p<.0001), surgical margin status (p<.001), perineural invasion (p<.001), serum prostate-specific antigen level at diagnosis (p=.004), Gleason score (p=.004), and pathologic stage (p<.0001). Maximum tumor diameter is a predictor of tumor volume and might be useful for the assessment of tumor volume in routinely processed prostatectomy specimens," the researchers concluded.

Eichelberger and colleagues published their study in the *American Journal of Clinical Pathology* (Predicting tumor volume in radical prostatectomy specimens from patients with prostate cancer. *Am J Clin Pathol*, 2003;120(3):386-391).

PALLIATIVE TURP MAY BENEFIT PATIENTS WITH PROSTATE CANCER

Study findings reveal that palliative transurethral resection of the prostate (TURP) may safely provide significant urinary symptom improvement among patients with advanced prostate cancer.

However, the data also suggest that rates of postoperative urinary retention and re-operation appear to be higher in these patients than in patients undergoing TURP for BPH.

Investigators performed a retrospective review of patients with prostate cancer undergoing palliative TURP at a single institution.

The authors reviewed operative reports as well as outpatient and inpatient records. Lead researcher Donald Crain and team compared serum PSA and cancer stage/grade at cancer diagnosis with the findings at TURP.

In addition, the patients operative statistics, postoperative outcomes and complication rates were compared between the palliative prostate cancer TURP group and a cohort of 520 patients undergoing TURP for BPH. Both arms were evaluated between 1994 & 2001. Statistical between-group differences were determined with the Fisher exact and 1-sample t test.

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MEN OVER 40

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says senior author Elisabeth Kunkel, M.D., professor and vice chair for Clinical Affairs in the Department of Psychiatry and Human Behavior at Jefferson Medical College of Thomas Jefferson University.

Drs. Kunkel, Myers and their co-workers at Jefferson's Kimmel Cancer Center report their findings in the current issue of the journal *Cancer Epidemiology, Biomarkers and Prevention*.

Prostate cancer screening is controversial. Prostate cancer tends to grow slowly, and debate centers on whether or not early detection and treatment do more harm than good. It is also unclear if so-called preventive methods such as diet, exercise and supplements such as selenium actually help prevent prostate cancer.

The researchers wanted to know what men do - if anything - to protect themselves from developing prostate cancer. The team surveyed two groups of men by either phone or mail and combined their data. In the study, 441 men were asked if they were taking any steps to protect themselves against prostate cancer, and what those steps were. In addition, they were asked if they had had screening - a prostate specific antigen, or PSA, test and/or a digital rectal exam - in the past year. Their responses were classified into three categories: conventional care, such as screening; self-care, which includes watching diet, getting regular exercise, taking nutritional supplements; and doing nothing regarding prevention.

According to the survey, says Dr. Myers, "Whether or not men take protective action seems to be influenced by socioeconomic status and their perceptions about screening - whether they think taking certain actions is worth it and is convenient. The decision to take protective action is also influenced by their perception of their risk."

"Most men we describe as engaging in conventional care are more

educated, and they believe screening is effective and easy to do," Dr. Myers says. Conventional care users tend to be better off socioeconomically and look for ways to protect themselves from disease, he says. "Men who do self-care seem to be less advantaged socioeconomically, are not very concerned about prostate cancer and screening, and think less about protective behavior."

Twenty percent of those questioned said they didn't take any steps to prevent prostate cancer.

Men were more likely to do self-care if they were less worried and concerned about prostate cancer - a surprising result, says Dr. Kunkel. "Clinically, that hasn't been our experience," she says. "We've found that the more worried and concerned men are, the more likely they are to use non-conventional practices."

"It is the first time prostate cancer behaviors have been categorized in this way," says Dr. Kunkel. "People have looked at screening behavior, but no one has looked at the use of self-care to protect yourself against prostate cancer, whether that is really protective or not."

Dr. Myers agrees. This survey, he says, "is a more comprehensive look at protective behavior. It's the first paper to ask the question about how men protect themselves against disease and to put forward some ideas as to why men make different choices."

In one of the studies, the participants were African-American men between 40 and 69 who were seen in three primary care practices in Philadelphia. African-American men have a higher risk for prostate cancer than other groups. In the other study, the subjects included both white and non-white men between ages 50 and 69 who were seen at a university-based internal medicine practice in Philadelphia. In both surveys, participants saw their primary care doctor in the past two years and had no known problems with their prostate gland. They didn't have a history of cancer or benign prostate

disease. They had never had a prostate biopsy or ultrasound.

Dr. Kunkel says, "We need to learn more in terms of both white and non-white men who decide to use different protection strategies, and what in terms of sociodemographic, cognitive and social support factors affect screening behaviors."

"We would like a better understanding of the behaviors in terms of teasing out whether they do these behaviors as part of a general lifestyle or whether these behaviors are specifically to protect themselves against prostate cancer," she says. Next, the researchers will investigate "how the role of the physician interfaces with this behavior in terms of what suggestions physicians make that influence decision-making."

Future studies should examine larger, more geographically diverse populations of men, she notes.

CPDR PUBLISHES GROUNDBREAKING STUDY ON THE RELATIONSHIP BETWEEN OBESITY AND PROSTATE CANCER

A newly released paper on the relationship between obesity and prostate cancer is gaining attention for the DoD Center for Prostate Disease Research (CPDR) in Rockville, Maryland. The paper by Dr. Christopher Amling, Dr. Robert H. Riffenburgh, Dr. Leon Sun et al., published in the February 2004 issue of the *Journal of Clinical Oncology*, is entitled "Pathologic Variables and Recurrence Rates as Related to Obesity and Race After Radical Prostatectomy". The paper was even featured in the editorial section of the journal as well as on the front cover of this high impact publication - a mark of distinction for the CPDR group.

Dr. Christopher Amling, assigned to Naval Medical Center, San Diego, and lead author of the study, reports

that many news groups including the New York Times and ABC News Radio have interviewed him about the paper and its groundbreaking results. The goal of this study was to explore the impact of obesity, a current epidemic in the American population, and race on the pathologic features and outcome of men undergoing radical prostatectomy. "We evaluated a large population of radical prostatectomy patients from the nine CPDR sites and looked at the relationship between Body Mass Index (BMI) and pathological outcome (grade and stage), and the probability of recurrence of cancer after radical prostatectomy" he commented. Patient data from 1987 to 2002 was used, with patients categorized as obese (BMI ≥ 30 km), overweight (BMI 25 to 30 km) or normal (BMI ≤ 25). Normal and overweight groups were combined and then compared with the obese group.

The intake of dietary fat has been consistently associated with the risk of prostate cancer and red meat has been linked to the development of more aggressive disease. But even though lifetime dietary fat consumption and obesity are clearly linked, the relationship between obesity and the development of more aggressive prostate cancer, particularly in radical prostatectomy patients, is unknown.

Dr. Amling continued "We found that obese men had a more aggressive form of disease, with higher grade cancer and higher recurrence rates after surgery. African-American men, who also had more aggressive tumors and higher recurrence rates, were also more likely to be obese." He concluded that the findings of the CPDR group and those of others suggest that body mass or obesity may have some role in the racial disparity in tumor behavior. Further study is warranted.

For more information on CPDR visit their website at www.cpdr.org.

OSTEOPOROSIS RISK

(continued from page 3)

Diamond notes this type of hormone therapy, called androgen deprivation therapy (ADT), which blocks the production of testosterone, is now commonly used in elderly men who have advanced or high-risk prostate cancer that is not suitable for more aggressive treatment.

In their study, Diamond and his colleagues reviewed all the literature related to ADT and osteoporosis and fractures from 1986 to 2000. Their conclusions are based on nine studies that included a total of 208 patients, according to their report in the Jan. 19 online issue of Cancer.

Diamond notes that, in some studies, bone mineral density measurements were up to 17 percent lower in men with prostate cancer treated with ADT than in men not receiving the hormone therapy.

And in other studies, after only 12 months of ADT therapy, ADT contributed to bone loss of up to 8 percent from the mid-spine and up to 6.5 percent from the neck of the femur -- the thigh bone. These losses in bone density may increase with time, Diamond says.

In addition, the researchers found fractures were more common among men receiving ADT compared with men not receiving ADT.

However, Diamond's team found drugs that prevent bone breakdown, called bisphosphonates, such as pamidronate and zoledronate can prevent bone loss and may even increase bone mass in these patients.

Diamond advises that since osteoporosis is usually a silent disorder, patients should request a full osteoporotic evaluation from their doctor before starting ADT. The evaluation should include bone density tests and X-rays. If necessary, patients should be treated with bone-building drugs, he adds.

Diamond's team is beginning a study of 1,000 men with prostate cancer

receiving ADT. In the study, the men will be given either zoledronate or a dummy drug.

"This study will determine the 'true' fracture risk in these high-risk patients, as well as the efficacy of zoledronate for preventing bone loss and fractures," Diamond says.

Dr. Clifford Rosen, a professor of nutrition at the University of Maine, agrees that "fractures due to rapid bone loss from ADT is a significant cause of problems in men with prostate cancer."

Preventive therapy with bone-building drugs and calcium and vitamin D is essential to prevent painful fractures, he says.

"Although more work needs to be done, it is conceivable that the bisphosphonates may also reduce the risk of subsequent bone cancer, another serious complication of prostate cancer," he adds.

However, Rosen cautions there is clearly a need for more studies.

"This study provides some solid evidence for the need to have disease recognition and treatment," he says. "However, the number of studies and the number of subjects under investigation has been quite small. More research is desperately needed to better understand the risks of ADT and to clarify the best treatment approaches."

FOCUSED ULTRASOUND SURGERY CAN DESTROY TUMOR TISSUE NONINVASIVELY

High-intensity focused ultrasound (HIFU) shows promise for noninvasive thermoablation of several types of tumors.

"There is an increasing interest in high intensity focused ultrasound (HIFU) for thermo ablative tumor therapy. The attractiveness of this method is based on its ability to destroy tumor tissue noninvasively

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DRUG STUDY GUIDELINES

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studies. They recommend limiting treatment to patients who are at expected risk for developing metastatic disease. In addition, the group recommends that the only drugs that should continue to be evaluated in trials are ones that have demonstrated sufficient clinical activity as measured by a stabilized or declining PSA for a sufficient number of patients in a specified time. The Working Group's recommendations are published in the February 1, 2004 issue of The Journal of Clinical Oncology.

"We have not had good clinical models to help us predict whether the prostate cancer patient with a rising PSA after a radical prostatectomy or radiation therapy should be treated or observed," explained Dr. Howard Scher, Chief of the Genitourinary Service at Memorial Sloan-Kettering and first author of the study. "These guidelines will help standardize patient selection for a clinical trial, allowing us to tell a patient that a particular therapy is worth pursuing and what it will do for him in relation to his disease."

The working group looked at a patient population of men who had been previously treated for localized prostate cancer with either a radical prostatectomy or radiation therapy but now had a rising PSA, indicating treatment had failed. These men fall into two main categories. One is men whose rising PSA will not turn out to be clinically significant. Since they are not likely to die from their disease, treatment could actually be detrimental and shorten survival. The other sub-set is men whose rising PSA marks the onset of progression to metastatic disease. These patients have a systemic recurrence and a defined risk of developing clinically detectable metastases. Because early therapy may be life-saving for them, the Guidelines limit participation in clinical trials solely to these patients.

The Guidelines also have clinical trials criteria. Only therapies that have shown to be effective in advanced disease in other tumors and/or shown to affect a target or pathway known to contribute to prostate cancer progression should be studied. To move a drug forward, the trial should demonstrate that a significant proportion of patients had a decline or no increase in PSA and have prostate-cancer specific

survival or extension of the time to development of metastatic disease. Drugs that cannot pass this high bar should not continue to be tested as a single agent but can be looked at in combination with other drugs.

"We hope that by creating a uniform system for evaluating treatments in patients with recurrent prostate cancer, we will be able to improve our understanding of the clinical course of the disease, and offer our patients treatments that are effective," explained Dr. Scher.

The research was conducted by a multi-disciplinary team of specialists in medical oncology, urologic surgery, radiation oncology, clinical chemistry, and biostatistics. Led by Dr. Scher and Howard Soule, Ph.D. of the Prostate Cancer Foundation, it included participants from Memorial Sloan-Kettering, Columbia Presbyterian Medical Center, Brigham and Women's Hospital, Dana Farber Cancer Institute, Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, University of California San Francisco, the Prostate Cancer Foundation, Duke University, University of Michigan Ann Arbor, University Of Washington, Aventis Pharmaceuticals, University of Wisconsin Comprehensive Cancer Center, Uniformed Services University, Johns Hopkins Hospital, and the University of Texas MD Anderson Cancer Center.

HIFU SHOWS PROMISE

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while sparing surrounding tissue from outside the body," investigators in Germany report.

"HIFU induced tissue necroses are sharply circumscribed," Therefore this method was termed focused ultrasound surgery (FUS). The therapeutic potential of FUS is under investigation in several clinical studies. Main objects of these studies are prostate carcinomas, breast kidney and liver tumors," wrote J.W. Jenne and colleagues, Deutsch Krebsforschungszentrum.

"The next innovative step will be the non invasive FUS treatment of brain through the intact skull," they added.

The researchers concluded: "Combining FUS with magnetic resonance imaging (MRI) or diagnostic

ultrasound allows accurate and online therapy guiding and monitoring. This article gives an overview of the basics, the latest developments and actual clinical studies in the field of focused ultrasound surgery."

Jenne and colleagues published their study in Radiologe (Focused ultrasound surgery. Basics, current status, and new trends. Radiologe, 2003;43(10):805-812).

TURP MAY HELP

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According to the results, 24 palliative TURPs were performed in 19 subjects with prostate cancer. The average patient age at prostate cancer diagnosis was 68.7 years (range, 49-87 years). The median PSA was 39.7 ng/ml (range, 1.5-334 ng/ml) at cancer diagnosis. Eleven patients (58%) received radiation therapy as the initial treatment, while the remainder of the subjects received initial hormonal therapy. The mean patient age at TURP was 74.2 years (range, 50-91 years), and the mean time from prostate cancer diagnosis to TURP was 49.7 months (range, 1-196 months).

The authors found that while only 22.7% of the patients had high-grade cancer (Gleason score, 8-10) at diagnosis, 67% of the subjects were determined to have high-grade cancer at the time of palliative TURP (P=.001). Following TURP, the average urinary flow rate reduced from 9.6 to 7.3 cc per second (P=.453). Furthermore, the International Prostate Symptom Score improved from 21.1 to 11 (P=.002) following the procedure.

When compared with patients undergoing TURP for BPH, the patients who received palliative TURP for prostate cancer were more likely to have a failed initial voiding trial (P<.001), and require re-operation (P<.001), chronic drainage (P=.001), and re-catheterization for bleeding or obstruction (P=.056).

These men benefit from significant improvement in urinary symptoms despite a significantly greater likelihood of further intervention and additional procedures than in patients undergoing TURP for benign prostatic disease, the authors concluded. (J Urol 2004;171:668-71.)