

INSIDE THIS ISSUE:

- Treatment Option Is YOUR Choice
- NexCura Donates Prostate Pointers
- NCCN Urges Screening At Age 40
- Aspirin May Keep Prostate Healthy
- Could Milk Be a Cause of Cancer?
- Can A Plant That Acts Like Poison Ivy Cure Prostate Cancer?
- Metastasis-Associated Protein 1 Signals Prostate Cancer Progression
- Active Surveillance Is A New Management Strategy For Early Prostate Cancer
- Finasteride Adversely Affects The Early Diagnosis Of Prostate Cancer
- Radiation After Prostate Cancer Recurs Benefits High-Risk Patients
- Investigational Anti-Cancer Drug Phenoxodiol Produces Response and Restores Chemo-Sensitivity
- PCGEM1 May Play Role In Prostate Cancer Development, Progression
- Ejaculating More Is No Cancer Risk

NEXCURA DONATES PROSTATE POINTERS WEB-BASED SERVICES TO US TOO

NexCura, Inc. and Us TOO International announced that NexCura has donated their Prostate Pointers Web resource to Us TOO International, the world's oldest and largest independent, non-profit, 501(c)(3), prostate cancer education and support network, effective April 1, 2004.

The Prostate Pointers Web site, found at <http://www.prostatepointers.org>, provides online information and support to prostate cancer patients and their families through 13 focused and moderated mailing lists on a variety of prostate cancer related topics, and a collection of papers, reports and indices from other sites which contain information about the diagnosis and treatment of prostate cancer.

The crown jewel and most active resource on Prostate Pointers is the *Patient to Physician (P2P)* mailing list, where patients can post specific clinical questions with accompanying medical history to physicians specializing in the field of prostate cancer. The physicians respond with comments and information that the patients can then take back and discuss with their own primary care physician. Other lists include *The Circle*, which provides a place for wives, families, friends, and significant others of men with prostate cancer to share, cope and gain strength from each other; treatment

(continued on page 4)



Us TOO[®]
PROSTATE CANCER
EDUCATION & SUPPORT

HOT SHEET

MAY 2004

TREATMENT OPTION IS *YOUR* CHOICE: BE SURE YOU STAY WELL-INFORMED

The Medicare Prescription Drug and Modernization Act, passed in late 2003, included major changes in Medicare payments for cancer and other drugs currently covered by Medicare Part B and administered in physician's offices. For the first time in history the law provides limited coverage for prescription drugs.

In 2004 the formula for reimbursement for many prostate cancer drugs was changed in anticipation of even greater changes due in 2005 – when reductions of almost 50% in physician reimbursement for some drugs have been projected.

The new pricing methodology for Medicare Part B drugs also creates the potential for some providers to make decisions guided by reimbursement rates – rather than the needs and preference of their patients. This change requires even greater vigilance and understanding on the part of patients about decisions being made related to their care. In addition, it re-emphasizes the fact that the patient – *and not the physician* – is responsible for deciding on any course of treatment to be provided.

If your physician recommends a change in your therapy you have the right – and the responsibility – to obtain a clear understanding of all the reasons that make such a change *medically* preferable. The American Urological Association (AUA) recently reminded its members that making decisions based on potential profit to the physician rather than on medical necessity or patient convenience is unethical and illegal – and something which risks federal indictment, fines, loss of medical license and possibly jail time.

Be sure you understand and agree that such a change is in *your* best interest and according to *your* wishes. You have the right to approve or deny such changes – and to require your physician to inform you of all reasons for any recommended change to your treatment plan.

NCCN URGES CHANGE IN PROSTATE CANCER EARLY DETECTION: SCREENING AT AGE 40

NCCN, a national network of cancer centers is recommending a much more aggressive approach to prostate cancer screening, including the possibility of testing all men as early as age 40. The change could affect nearly 50 million people.

(continued on page 8)

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

Items contained in *Us TOO* publications are obtained from various news sources and edited for inclusion. Where available, a point-of-contact is provided.

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ASPIRIN MAY KEEP PROSTATE HEALTHY

Though the evidence for it isn't as compelling as it is for some other cancers, aspirin may modestly reduce the risk that a man will develop prostate cancer, a large new study suggests.

Men who regularly took aspirin had a 15 percent lower risk of developing prostate cancer than nonusers, and those who took two or more pills a day had 20 percent less risk, the study found.

That's a relatively small reduction - experts usually like to see risk cut in half to declare something substantially beneficial - but it's large when considering the burden of disease. About 230,000 new cases of prostate cancer are expected to be diagnosed in the United States this year.

Looked at another way, the benefit that this study suggests from aspirin use isn't much less than the 25 percent reduction in risk that another study last year found for men taking finasteride, sold as Proscar. Those findings, which came from a more rigorously conducted study than the aspirin one, excited federal health officials so much that they stopped the study and declared the drug beneficial.

Aspirin is a nonsteroidal anti-inflammatory drug, or NSAID, a category that includes most over-the-counter pain medications except for acetaminophen (Tylenol). NSAIDs block a substance called COX-2, which triggers inflammation and is thought to play multiple roles in cancer's formation and spread.

Many studies suggest that aspirin can prevent colon cancer, but tests of it against hormone-fueled cancers such as breast and prostate have been mixed.

The most recent research gives reason for optimism. Last year, the Women's Health Initiative study found that aspirin cut breast cancer risk by 20 percent to 30 percent, and earlier this year, a pooled analysis of results on prostate cancer experiments concluded that aspirin might help.

The newest study adds to that notion. Results were presented at a recent meeting of the American Association for Cancer Research in Orlando.

The study involved 30,000 men ages 55-74 in the Prostate, Lung, Colorectal and Ovarian Cancer Screening Trial, a National Cancer Institute-funded experiment underway at 10 sites around the country. About one-third of the men said they took aspirin daily, although information on whether they took adult- or baby-strength aspirin wasn't collected.

After an average of four years of follow-up, 1,338 prostate cancers were diagnosed in the group. The cancer risk was 15 percent lower among men who took one aspirin a day compared with those who took no aspirin, and 20 percent lower among those who took two pills or more a day, said Lori Sakoda, a cancer institute scientist who led the research.

So why not just recommend aspirin?

Because the drug carries risks, such as bleeding ulcers or intracranial hemorrhage, and these risks rise with age, experts say.

"Whenever you have solid evidence that a drug has harm, you need equally solid evidence of benefit," said Michael Thun, chief epidemiologist for the American Cancer Society.

"We're getting close with colon cancer," but more research needs to be done before aspirin could be recommended for preventing other cancers, he said.

Even if aspirin turns out to be of only modest benefit for the average man, it may be more beneficial for those at higher-than-average risk, said Edward Giovannucci, a Harvard School of Public Health epidemiologist familiar with the new study.

"It might be more important for men with a strong family history or high PSA tests," he said.

THE *Us TOO* PROSTATE CANCER HOT SHEET
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More research needs to be done on which drug, what dose, at what age, and for how long various NSAIDs or newer COX-2-inhibiting drugs should be taken, if at all. Each person's risk profile for an array of diseases would need to be considered, experts say.

"One doesn't design preventive treatment only for one disease. You really do things for overall health, so it's going to be the net benefit compared to the net risk," Thun said.

"For most people, heart disease is going to drive this decision," he said, noting that many people already use aspirin for this reason.

Patrick Remington, an epidemiologist and associate director of the University of Wisconsin Comprehensive Cancer Center, said it was interesting that research increasingly suggests NSAIDs may affect the risk of multiple cancers, not just one type.

"It's beginning to tell us something about how these tumors evolve. It seems that inflammation is a fundamental process in the development of cancer," he said. "Ten years ago, this information wasn't known."

COULD MILK BE A CAUSE OF CANCER? A CONTROVERSIAL THEORY SINGLES OUT DAIRY PRODUCTS AS A POSSIBLE TRIGGER

SOURCE: The Independent - London

Food was the last thing on Amanda Myer's mind when she was first diagnosed with breast cancer four years ago, at the age of 43. "I was already eating what I considered to be a healthy, balanced diet and didn't see any need to change it. I'd read somewhere that kiwi fruit contained lots of antioxidants, so I'd have one every day, and I think I started buying organic milk. But that was as far as it went."

A year later, after the cancer had cleared and then returned, it was a different story.

"It was a question of, ah, how am I going to get out of this scrape," she recalls. "I was lucky to be receiving excellent medical treatment, but I felt I needed something extra, that this time I really had to find a way to help myself."

Before she even underwent further hospital treatment, she took her sister's advice and went on a residential course at Bristol Cancer Help Centre (BCHC), the holistic charity that has pioneered physical, spiritual and emotional support for people with cancer. Now recovered, she was told by her consultant last month that she was his "fittest patient". And she puts her health status down to the Centre's supportive counselling, to learning relaxation and visualisation techniques - and, above all, to finding out what to eat and what not to eat to stop her cancer recurring.

From its beginnings, BCHC has been associated with the provision of nutritional advice - in the early years, promoting the faddish Bristol Diet, involving much juicing and regular coffee enemas. More recently, however, it has brought together the growing mass of evidence showing, for instance, the link between diet, obesity and cancer. Now, however, it is edging towards controversy again by taking on one of the most contentious issues in nutrition today.

Last month, the centre invited the eminent scientist Professor Jane Plant MBE, bestselling author of *Your Life in Your Hands - Understanding, Preventing and Overcoming Breast Cancer* (Virgin Books), to address an audience of scientists, doctors and policy-makers at a keynote lecture on diet and cancer. The specific aim of the event was to spark a debate over whether dairy food should carry a health warning in relation to specific cancers.

Professor Plant's war against dairy and non-organic food started 10 years ago, after her breast cancer had recurred four times in the space of a few years. The presence of a huge tumour in the side of her neck, and a prognosis of less than three months, inevitably focused her mind. She spent an evening brainstorming with her husband, also a scientist, who had recently returned from working in China, over the possible reason why one in 10 women get breast cancer in the UK compared to

one in 10,000 in China.

"Something rather special happened," she recalls. "Peter and I have worked together so closely over the years that I am not sure which one of us first said, 'The Chinese don't eat dairy produce'." Recalling the slang name for breast cancer in China - "Rich women's disease", because "they're people who eat Hong Kong food, things like ice cream and cheese", provided further confirmation - as did her further foray into the science behind the epidemiology.

Hormones and chemicals in cow's milk, designed to provoke the rapid early growth of infant cattle, she discovered, include insulin growth factor IGF-1, which causes cells to divide and reproduce - exactly the mechanism that occurs when tumours develop. There were small but significant studies proving the role of IGF-1 in the development of cancer - for instance, showing that pre-menopausal women with high levels of IGF-1 have a higher than average risk of breast cancer, as do dairy-eating vegetarians.

By then, however, Plant was already convinced. Having thrown everything dairy into the rubbish bin that evening, she found that the lump started to reduce in size within days and disappeared within weeks. Her experience in personally advising scores of other women, and thousands of others who have read her book and e-mailed her "to thank me for saving their lives" has convinced her of a "clear link between breast cancer and dairy produce".

Her new book, *Understanding, Preventing and Overcoming Prostate Cancer*, published next month by Virgin Books, will recommend the same diet of non-dairy, exclusively organic produce (to avoid toxic pesticides and pollutants) for sufferers from this increasingly common tumour, which, like breast cancer, is hormone-related, and which, incidentally, is almost non-existent in rural China. If her previous book is anything to go by, it is set to have a major impact on public confidence in mainstream dietary advice.

For the problem is that the dairy danger is viewed as extremist and unproven by most oncology specialists. The dearth of good clinical trials to support what is, they

(continued on page 8)

PROSTATE POINTERS JOINS FORCES WITH US TOO

(continued from page 1)

option-oriented lists such as *RP* (radical prostatectomy), *SeedPods* (brachytherapy), and *IceBalls* (cryosurgery); and even *HaH*, which focuses on humor and healing.

Five years ago when NexCura began as cancerfacts.com, they acquired the most popular prostate online community called Prostate Pointers (PP), which had been founded by prostate cancer survivor Gary Huckabay. Peter Hoover, President/CEO, says "With NexCura's change in business models to research and communication services over the last two years, it no longer made sense for us to support PP from within our company. We wanted to give it to a good home—preferably a non-profit organization to keep the content unbiased and quality high. Because of our longstanding and positive working relationship with Us TOO, this wonderful organization was determined to be an ideal fit and logical choice."

"We truly appreciate NexCura's significant donation," says John Page, Us TOO President and CEO. "Their generosity is just indicative of the ongoing relationship we have with NexCura. Prostate Pointers provides information and support services that fit directly within our mission of providing public awareness, outreach, and patient and family education and support. Adopting the listservs and site allows Us TOO to easily expand our outreach and support services to prostate cancer patients and their families with specific areas of interest or treatment options."

No significant changes are planned for the site at this time, and all participating physicians, moderators, and current support staff will continue their support and activity with Prostate Pointers.

About NexCura

NexCura is a Seattle-based healthcare education and information company that offers patients, caregivers and providers relevant, timely and evidence-based knowledge that is individually tailored to each patient's unique clinical situation, enabling them to make better informed decisions about treatment options and

care. The company distributes its *NexProfiler™ Treatment Option Tool for Prostate Cancer* at no cost through the Us TOO website. The NexProfiler Tool provides prostate cancer patients, caregivers and health care providers with information about possible treatment choices.

Can A Plant That Acts Like Poison Ivy Cure Prostate Cancer?

A shrub found in Southeast Asia can give you a rash like poison ivy; but it may also stop prostate cancer.

The croton plant, long known to oriental herbalists and homeopaths as a purgative, has an oil in its seeds that shows promise for the treatment of prostate cancer, the second leading cause of cancer death in men in the United States. The active ingredient in the oil is 12-O-tetradecanoylphorbol-13-acetate, a compound generally known as TPA.

The finding was reported in the March 1, 2004, issue of *Cancer Research* by Xi Zheng, Allan Conney and other scientists at the Susan Lehman Cullman Laboratory for Cancer Research at Rutgers, the State University of New Jersey, and the Cancer Institute of New Jersey (CINJ).

"We demonstrated that TPA could simultaneously stop the growth of new prostate cancer cells, kill existing cancer cells and ultimately shrink prostate tumors," said Conney, the William M. and Myrle W. Garbe Professor of Cancer and Leukemia Research at Rutgers' Ernest Mario School of Pharmacy, and a member of CINJ.

In addition to studies on the effect of TPA alone, the researchers also tested TPA in combination with all-trans retinoic acid (ATRA), a vitamin A derivative previously shown to be effective in treating leukemia.

"We knew that ATRA is an effective synergist with TPA in treating leukemia cells in the laboratory, but prostate cancer is a different situation, probably involving different molecular mechanisms," Conney said.

The studies by Zheng and Conney are the first to show an impressive synergy

between TPA and ATRA in inhibiting the growth of cultured prostate cancer cells and the first to assess their combined effects, and the effects of TPA alone, on human tumors grown in mice.

Scientists, intrigued by the skin-irritating property of croton seed oil, demonstrated more than 50 years ago that croton oil and its constituent TPA promoted tumors in laboratory animals following the introduction of a strong carcinogen at a low dose. Subsequent laboratory tests, however, produced dramatically different outcomes.

"It turned out that extremely low concentrations of TPA had an extraordinarily potent effect on myeloid leukemia cells, causing them to revert to normal cell behavior," Conney explained.

However, it was a long time before anyone acknowledged that TPA could actually do good things for people, Conney observed.

Investigators at China's Henan Tumor Research Institute and Rutgers, interested in the potential beneficial effects of TPA, began a collaborative study in 1995. When TPA was administered to terminally ill myeloid leukemia patients in China, the number of leukemia cells in the blood and bone marrow decreased and there were remissions of the disease.

"We are clearly encouraged by our laboratory results with TPA and ATRA on prostate cancer cells," Conney said. "Our studies are an important early step in a long process, and we are planning additional testing in humans. Further research with these compounds and others could provide hope for the half million new cases of prostate cancer each year."

METASTASIS-ASSOCIATED PROTEIN 1 SIGNALS PROSTATE CANCER PROGRESSION

Analysis of DNA microarray data finds that metastasis-associated protein 1 (MTA1) is overexpressed in metastatic prostate cancer and is associated with disease progression.

According to a study from the United States, "Distinguishing aggressive

prostate cancer from indolent disease represents an important clinical challenge, as current therapy requires over-treating men with prostate cancer to prevent the progression of a few cases. Expression of the MTA1 has previously been found to be associated with progression to the metastatic state in various cancers.

“Analyzing DNA microarray data, we found MTA1 to be selectively overexpressed in metastatic prostate cancer compared with clinically localized prostate cancer and benign prostate tissue. These results were validated by demonstrating overexpression of MTA1 in metastatic prostate cancer by immunoblot analysis,” wrote M.D. Hofer and colleagues, Harvard University, School of Medicine.

“MTA1 protein expression was evaluated by immunohistochemistry in a broad spectrum of prostate tumors with tissue microarrays containing 1940 tissue cores from 300 cases. Metastatic prostate cancer demonstrated significantly higher mean MTA1 protein expression intensity (score = 3.4/4) and percentage of tissue cores staining positive for MTA1 (83%) compared with clinically localized prostate cancer (score = 2.8/4, 63% positive cores) or benign prostate tissue (score = 1.5/4, 25% positive cores), with a mean difference of 0.54 and 1.84, respectively ($p < .00001$ for both),” the researchers stated.

The researchers concluded: “Paradoxically, for localized disease, higher MTA1 protein expression was associated with lower rates of prostate specific antigen recurrence after radical prostatectomy for localized disease. In summary, this study identified an association of MTA1 expression and prostate cancer progression.”

Hofer and colleagues published the results of their research in *Cancer Research* (The role of metastasis-associated protein 1 in prostate cancer progression. *Cancer Res*, 2004;64(3):825-829).

ACTIVE SURVEILLANCE IS A NEW MANAGEMENT STRATEGY FOR EARLY PROSTATE CANCER

Researchers advocate a program of active surveillance for selected patients with early prostate cancer, as opposed to radical treatment.

According to recent research published in the journal *Lancet Oncology*, “Prostate cancer is the only human cancer that is curable but which commonly does not need to be cured. Active surveillance is a new strategy that aims to individualize therapy by selecting only those men with significant cancers for curative therapy.

“Patients with favorable tumor characteristics are closely monitored using serum prostate specific antigen (PSA) concentrations and repeat prostate biopsies. The choice between radical treatment and continued observation is based on evidence of disease progression, defined in terms of the IPSA doubling time, and “upgrading” at repeat biopsy,” wrote C. Parker and colleagues, Royal Marsden Hospital, Cancer Research Institute.

“Active surveillance provides an excellent opportunity for studies to identify markers of prostate-cancer behavior. Knowledge of prostate cancer biomarkers would have an immediate effect on clinical decision-making and would also identify targets for the development of novel therapeutic strategies,” they added.

The researchers concluded: “In the longer term, active surveillance may accelerate progress towards a new treatment paradigm for early prostate cancer based on the selective use of therapies designed, not to eradicate the disease, but to alter its natural history.”

Parker and colleagues published their study in *Lancet Oncology* (Active surveillance: towards a new paradigm in the management of early prostate cancer. *Lancet Oncol*, 2004;5(2):101-106).

FINASTERIDE ADVERSELY AFFECTS THE EARLY DIAGNOSIS OF PROSTATE CANCER

According to a study from the United States, The Prostate Cancer Prevention Trial (PCPT) reported conclusively that finasteride prevents or delays the detection of prostate cancer. “One perplexing finding was that more high-grade tumors were detected in the finasteride treated group. It is hard to put this into perspective because of the limited published data on the effects of finasteride on prostate cancer,” wrote M.A. Rubin and colleagues, Harvard University, School of Medicine.

“The strong possibility exists that the increase in high-grade tumors may be due to a treatment effect, which causes intermediate grade cancers to appear to be high-grade or aggressive tumors. Confirmation of a spurious tumor grade ‘inflation’ will make the conclusions of this study clearer and define the benefits of finasteride chemoprevention in a more favorable light,” the researchers concluded.

Rubin and colleagues published the results of their research in the *Journal of Cellular Biochemistry* (Effect of finasteride on risk of prostate cancer: How little we really know. *J Cell Biochem*, 2004;91(3):478-482).

RADIATION AFTER PROSTATE CANCER RECURS BENEFITS HIGH-RISK PATIENTS

A recurrence of cancer after a diseased prostate is removed is not necessarily as dire as doctors once believed, and radiation could save the lives of many men with such a condition, a study found.

Until now, doctors believed that certain ominous signs, including rising levels of a protein called PSA, usually meant that the cancer had not only returned but had spread to other parts of the body and was incurable.

(continued on page 6)

INVESTIGATIONAL ANTI-CANCER DRUG PHENOXODIOL PRODUCES RESPONSE AND RESTORES CHEMO-SENSITIVITY

Data presented at the 95th Annual Meeting of the American Association for Cancer Research (AACR) in Orlando, Florida, confirms that phenoxodiol is on track in its development as a first-line therapy for early-stage cancers and as a chemo-sensitizing agent for late-stage cancers. Phenoxodiol, a XIAP-inhibitor, is an anti-cancer drug being developed by Marshall Edwards, Inc. The data presented concerned clinical studies conducted at U.S. and Australian hospitals, and pre-clinical studies conducted at U.S. research institutions.

Interim Results of Phase 1b/2a Data Shows Dose-Related Response

Late breaking data from a Phase 1b/2a clinical trial in late-stage prostate cancer patients supports the strategy of targeting this cancer type. Twenty-four patients with malignant prostate cancer and rising prostate specific antigen (PSA) levels (mean 60 ng/mL at start of study) were treated with phenoxodiol (oral dosage formulation) 3 times daily, for 3 weeks each month up to a maximum of 6 months. Patients received 1 of 4 different dosages - 20, 80, 200 or 400 mg. There were 6 patients per dose stratum.

This first trial of oral phenoxodiol was designed to confirm that the dosage form was biologically active. Activity was determined on the basis of PSA levels in the blood. PSA, a protein normally secreted by the prostate, is a marker commonly used to detect the presence of prostate cancer. Although not an absolute predictor of prostate cancer, it is generally accepted that as prostate cancer develops, a greater amount of PSA is released into the blood stream. Objective tumor response was not an aim of this study.

Interim results indicate that oral phenoxodiol is biologically active as evidenced by a dose-dependent effect on serum PSA level. When the 12 patients treated with the 2 highest dosages (200 and 400 mg) were tested after 3 months of therapy, 2 showed stabilization of their PSA levels, while 6 (50%) showed a

decrease in PSA levels. Two of these 6 responders showed a decline in PSA levels of greater than 75%. No toxicity was reported.

The clinical study was conducted in Australia by Dr. Robert Davies of Sir Charles Gairdner Hospital in Perth, Professor Alastair Tulloch of St John of God Hospital, Perth, and Dr. Mark Frydenberg of Monash Medical Centre, Melbourne. Co-investigator Dr. Davies said, "Late-stage prostate cancer is notoriously unresponsive to anti-cancer therapies, so to see this degree of response to phenoxodiol confirms our confidence in this investigational drug."

He also said, "While the results of this study suggest that phenoxodiol may be having a significant anti-cancer effect in its own right in prostate cancer, we believe that it has the potential to provide even greater benefit when used in combination with other drugs."

Dr. Graham Kelly, Executive Chairman of Marshall Edwards, Inc., said, "These data justify moving to the next step, which is a larger trial to test for objective tumor response to both phenoxodiol alone and in combination with chemotherapy, in men with late stage prostate cancer."

Mechanisms of Action: Phenoxodiol Induces Apoptosis by Disrupting Intra-Cellular Proteins

Phenoxodiol has been developed as a highly selective inducer of apoptosis in tumor cells that works by removing the intra-cellular proteins (XIAP, c-FLIP) that play a major role in ensuring the survival of cancer cells. Removal of these proteins has the dual effect of rendering the cancer cell susceptible to the body's normal defense mechanisms as well as making it more sensitive to the cytotoxic effects of standard anti-cancer drugs. The highly selective nature of phenoxodiol means that the drug has no discernible adverse effects on non-tumor cells, and its ability to enhance the killing effect of other chemotoxics is restricted to tumor cells.

Marshall Edwards, Inc., is developing phenoxodiol, an investigational anti-cancer drug, on two broad therapeutic strategies. First, as a first-line therapy for early-stage cancer (including prostate and cervical cancers) where early detection is

possible, and where the cancer is particularly prone to the apoptotic effect of phenoxodiol alone. Second, as a first-line therapy for late-stage cancers (including prostate carcinoma and renal carcinoma) to improve the responsiveness to standard chemotoxics in cancers that are intrinsically poorly sensitive to such drugs, or as a second-line therapy to restore responsiveness to standard chemotoxics in cancers (including ovarian carcinoma) that have acquired resistance to such drugs. Phenoxodiol has IND status within the U.S. and has not yet been evaluated by the FDA for marketing approval.

RADIATION AFTER PCA RECURS

(continued from page5)

These men generally were not offered radiation but were treated only with hormones, which can slow the disease but cannot stop it.

But the new study suggests that many of these men can be cured with radiation, because the cancer has not spread after all.

The study, published in the March 17 issue *Journal of the American Medical Association*, involved 501 men whose disease returned an average of about 10 months after their prostates were removed. All received radiation to treat the recurrence; half remained cancer-free an average of four years later.

For these men, radiation "changed the natural history of that disease," said lead author Dr. Kevin Slawin, director of the prostate center at Baylor College of Medicine in Houston.

Previous data suggest that in two-thirds of men who do not get radiation for cancer recurrence after surgery, the disease will spread elsewhere within 10 years and probably prove fatal, Slawin said.

Fewer than 20 percent of patients who suffer a recurrence get radiation treatment, known as salvage radiation, Slawin said.

Dr. Mitchell Anscher, a Duke University radiation oncologist, said

salvage radiation is used too infrequently, and often too late. The study is significant and suggests that radiation is warranted for the majority of patients whose recurrence was identified via PSA levels, Anscher said.

Prostate cancer is the second-most common malignancy in men after skin cancer. It is diagnosed in more than 200,000 men nationwide each year. While surgery is usually effective, cancer recurs in about 30,000 men yearly who have their cancerous prostates removed. After surgery, rising levels of PSA - prostate specific antigen - are usually used to diagnose a recurrence of cancer.

The results will provide useful guidance to help doctors better select which patients will most benefit from salvage radiation, Anscher said.

The study found that among patients with moderately aggressive initial prostate tumors, cancer cells at the edge of the surgically removed tissue, and a PSA level that doubled in less than 10 months after surgery, 77 men, or 64 percent, were cancer-free four years after radiation.

The success of the radiation suggests that the cancer had not actually spread beyond the pelvic area, Slawin said.

PCGEM1 MAY PLAY ROLE IN PROSTATE CANCER DEVELOPMENT, PROGRESSION

PCGEM1 is elevated in higher risk patients with prostate cancer, researchers report.

“According to published research from the United States, “PCGEM1 is a novel, highly prostate tissue-specific, androgen-regulated gene. Here, we demonstrate that PCGEM1 expression is significantly higher in prostate cancer (CaP) cells of African-American men than in Caucasian-American men (p=.0002).

“Further, increased PCGEM1 expression associates with normal prostate epithelial cells of CaP patients with a family history of CaP (p=.0400),” wrote G. Petrovics and colleagues, U.S. Military Cancer Institute,

Uniformed Service University of the Health Sciences, Center for Prostate Diseases Research.

The researchers concluded: “PCGEM1 overexpression in LNCaP and in NIH3T3 cells promotes cell proliferation and a dramatic increase in colony formation, suggesting a biological role of PCGEM1 in cell growth regulation. Taken together, the cell proliferation/colony formation-promoting functions of PCGEM1 and the association of its increased expression with high-risk CaP patients suggest the potential roles of PCGEM1 in CaP onset/progression, especially in these high-risk groups.”

Petrovics and colleagues published their findings in *Oncogene* (Elevated expression of PCGEM1, a prostate-specific gene with cell growth-promoting function, is associated with high-risk prostate cancer patients. *Oncogene*, 2004;23(2):605-611).

EJACULATING MORE IS NO CANCER RISK

ABCNews.com

No, it doesn't blind you. And now medical researchers say it's not going to give you cancer either.

Frequent ejaculation during masturbation or sex, a new study has found, isn't associated with an increased risk for prostate cancer, laying to rest a popular misconception. In fact, it may even decrease the risks for certain people.

The research, published in the *Journal of the American Medical Association*, is based on surveys of nearly 30,000 men from 1992 to 2000. The mostly white males ages 46 to 81 provided histories of sexual intercourse, nocturnal emission, and masturbation during their twenties, forties, and within the previous year.

Results showed no relationship between ejaculation frequency and prostate cancer for most categories.

In fact, men who reported frequent ejaculation over their lifetime - that's more than four to seven times per

month, in case you're counting - had fewer overall cases of prostate cancer than those who ejaculated less often.

And those tireless individuals averaging 21 or more ejaculations a month over their lifetime showed only half the risk for developing the disease.

The researchers noted 38 percent of married people over 60 in the United States have sex one-to-four times per month, while 15 percent are sexually active at least five times per month.

Findings More 'Provocative' Than Practical

Previous studies looking for a link between sex and prostate cancer have given mixed results. But some research seems to reinforce the latest finding.

For instance, a smaller Australian study published last year, concluded men who ejaculated five or more times a week in their twenties were one-third less likely to develop aggressive prostate cancer than men who ejaculated less often.

The investigator for the Australian study hypothesized that ejaculation helps to flush carcinogens and other toxic substances out of the prostatic ducts, a theory yet to be proven.

But one concern was raised about the study's validity. That is that it asked men in their forties and fifties to recall ejaculation frequency during their twenties.

“Can they really remember how often they ejaculated so many years ago?” wondered urologist Dr. Michael Naslund at University of Maryland Medical Center in Baltimore.

Dr. Michael O'Leary, a urologist at Brigham and Women's Hospital in Boston, commended the study but didn't think the results would likely translate into any new recommendations for patients at this time.

“The study is certainly amusing, but no one's going to tell their patients to ejaculate more frequently,” added Dr. O'Leary. “This study is provocative more than anything else.”

NCCN RECOMMENDS CHANGES TO EARLY DETECTION GUIDELINES

(continued from page 1)

The guidelines, released last month by the National Comprehensive Cancer Network, a group of 19 large hospitals that develops cancer-management and screening strategies, encourage doctors to offer prostate screening a decade earlier than what is called for in some recommendations. Doctors are not obligated to follow the group's proposals.

Prostate cancer is the second-leading cause of cancer death in men. The disease kills nearly 30,000 a year.

Some doctors note that many men already have unnecessary biopsies today. Two out of three with a suspicious score on a PSA test — which looks for the presence of a protein called prostate-specific antigen protein — do not have cancer. Prostate cancer treatment carries risks, experts say; it can leave up to 50% of men impotent and 10% to 20% with urinary problems or incontinence.

Other doctors predict that they will find cancers earlier, when they are more curable, by screening younger men.

The network advises doctors to offer a baseline PSA to men beginning at age 40.

The cancer network also suggests that doctors consider biopsies — taking tissue samples to check for cancerous cells — for men with PSA readings above 2.5 nanograms per milliliter. Today, doctors typically consider a biopsy when a man's PSA test is above 4.0.

Research shows that more than 20% of men with scores between 2.5 and 4.0 have cancer.

Deaths from prostate cancer have fallen about 20% among whites and about 16% among blacks since the mid-1990s after use of the PSA test became widespread, said William Catalona, a surgeon who is a member of the cancer network committee that drafted the guidelines.

Some doubt that PSA testing should get the credit. They note that improved treatments may

help more men survive.

Us TOO was the first major prostate cancer organization to establish a recommendation for early detection of prostate cancer with establishment of a baseline PSA for men by age 40 with follow-up testing to ensure that men "Know Your Score".

Us TOO firmly believe that all men have the right to request and receive a PSA and DRE to establish a baseline and actively participate in the monitoring of their health.

COULD MILK BE A CAUSE OF CANCER?

(continued from page 3)

say, so far only a theory, means that doctors rarely if ever raise the question of nutrition with cancer patients - and skate around the issues if they're asked.

For Dr Clare Shaw, consultant dietician at the Royal Marsden Hospital, the main priority for cancer patients undergoing treatment is the need to maintain adequate nutritional intake during gruelling radio- and chemotherapy. "Once that's over, people do have an opportunity to consider lifestyle changes that might help them to avoid a recurrence of cancer. But the issue for clinicians is that there's no evidence that avoiding dairy produce will bring any benefits. And research that can be generally applied will be difficult to carry out - because a diet involving no dairy and organic vegetables is more likely to attract a self-selected group of people who are middle class and middle-aged."

That may be true - but a way forward must be found, says BCHC. Of the 11,000 people who contact its helpline every year, over half want information on nutrition. "So often following a diagnosis of cancer, people want to find an accessible form of self-help with which they can get started immediately," says the director of therapy, Helen Cooke. "We know that 40 per cent of cancers

are caused by poor diet, and it seems highly likely that recurrences of existing cancers will also be affected by diet. People are fed up with being told to eat Mars Bars and extra ice-cream to keep up their weight. They want to find out what is truly nutritious."

BCHC is demanding that the Government backs independent research to identify the role of nutrition in preventing cancer recurrence, and that good quality information is available to everyone following a diagnosis. It's a move backed by leading oncologist, Professor Karol Sikora, World Health Organisation adviser on cancer. "Increasingly, people with cancer want to know what they can do for themselves, and they should be given all the support and information they need. If for no other reason, the psychological benefits are proven and I have no doubt that people who feel in control have a better chance of survival."

Bristol nutritionists do advise cutting back on dairy foods in favour of soya, with less meat and more grains and fruit and vegetables. But they don't go all the way with Jane Plant's "slightly extreme" dietary guidelines. "Our view is that people should try to add nutritious food to what they are already eating rather than focusing on giving things up. It's about adding more fruit and vegetables to what you normally eat rather than feeling guilty about enjoying coffee and croissants," says Cooke.

The approach has worked for Amanda Myer who now avoids dairy food, but not fanatically. "If I'm eating out and there's cheese in a dish, I'll eat it quite happily," she says. "I can't imagine that small quantities can have any adverse effect, and anyway, I want to avoid anything that makes life more difficult. I'll even buy non-organic food if there's no alternative. But I shudder to think of the quantity of pesticides that I must have consumed with all the non-organic red wine that I used to drink. I still enjoy wine, but now it's all organic," she says.