Manitoba Prostate Cancer SUPPORT GROUP

Newsletter

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Thanks!

Thought of The Day

"Nothing in the world can take the place of persistence. Talent will not; nothing is more common than unsuccessful men with talent. Genius will not; unrewarded genius is almost a proverb. Education will not; the world is full of educated derelicts. Persistence and determination alone are omnipotent. The slogan, 'press on' has solved, and always will solve, the problems of the human race."

– Calvin Coolidge

Public meetings cancelled until 2021

Important message from the board of directors……

Here it is some eight months since the nasty Covid-19 attack put an end to our regular public meetings. In March we had already arranged an exciting speakers program, which fell victim to the corona virus. We hoped for an early resumption of activities but unfortunately the pandemic stubbornly continues to devastate our lives. At this time there are promising developments of both vaccines and therapeutics, with indications that these may be ready for general distribution in the next few months. When that happens, and the restrictions on assembly in public are removed, we'll be able to resume our public meetings. Watch our newsletter for announcements on when that happy day arrives.

In the meantime the lull in normal activities is providing us with an opportunity to do some upgrading and repair to our organizational structure. Our board would be greatly strengthened by the addition of one or two good men or women. Recently one of our stalwart board members passed away. Several others are getting plain "wore out". In recent years our attendance has been in the 40 to 70 range with a rising trend, indicating our program is both valued and appreciated. Many of you have a skill set that would be of great value in assisting our board to do its work. In particular we are focusing on the areas of fund raising, accounting, general secretarial and some others. The time commitment necessary for service generally amounts to at most a few hours each month and in almost all cases can be done at your convenience. Spreading the work amongst more board members makes it easier for each one to do their job. *If you feel an inclination to get involved in providing this support service to the prostate cancer community in Manitoba please contact the board chairperson (contact info on the back page of this newsletter).* Thank you and stay safe.

The Board
Manitoba Prostate Cancer Support Group

SHARING IS CARING

The Manitoba Prostate Cancer Support Group offers support to prostate cancer patients but does not recommend any particular treatment modalities, medications or physicians ; such decisions should be made in consultation with your doctor.

MPCSG – active since 1992.

Focused Ultrasound Treatment Preserves Quality-of-Life for Prostate Cancer Patients

The first and largest study of focal high-intensity focused ultrasound (HIFU) ablation as a primary treatment for prostate cancer in the United States showed that HIFU provides an effective alternative to surgery or radiotherapy. Mirroring previous research conducted in Europe, the study of 100 men revealed encouraging outcomes and shortened patients' recovery times.

Focal HIFU ablation uses a focused ultrasound beam to raise the temperature inside the prostate to approximately 90°C to destroy targeted areas of prostate tissue. HIFU hemigland ablation, which treats targeted and known areas of prostate cancer, has been used successfully worldwide, with few of the debilitating urinary and sexual side-effects associated with standard treatments such as whole-gland radical prostatectomy and radical radiotherapy.

HIFU was approved for prostatic tissue ablation by the US Food and Drug Administration in 2015. Following this, the Keck School of Medicine of the University of Southern California offered it as a primary treatment for localized prostate cancer and launched the study to assess men who underwent a HIFU procedure for prostate cancer between 2015 and 2019.

The patients, ranging in age from 59 to 70, had very low (8%), low (20%), intermediate favourable (50%), intermediate unfavourable (17%) and high (5%) risk prostate cancer. Only 13 of these experienced minor complications after hemigland HIFU, such as difficulties with urination and urinary tract infection. No patients had major complications. Half of the patients completed quality-of-life questionnaires and reported improved urinary symptoms with no significant decrease in sexual potency. None experienced urinary incontinence.

Writing in the Journal of Urology, first author Andre Abreu, of USC Urology, and colleagues report that in a median of 20 months of follow-up, 73% of the patients did not experience treatment failure, defined as clinically significant cancer recurrence, metastases or mortality, or the need for additional hormone therapy, chemotherapy, radiotherapy or surgery. Bilateral prostate cancer at the time of diagnosis was the sole predictor for recurrence. Ninety percent of patients did not require repeat focal HIFU, and 91% did not need any type of radical (whole-gland) treatment within the study timeframe.

The researchers also emphasize the importance of mandatory follow-up biopsies. This recommendation is based on data showing that multiparametric MRI has a sensitivity of only 44% for detecting clinically significant prostate cancer, despite it being the preferred imaging modality for follow-up after partial gland ablation.

"Focal HIFU ablation is safe and provides excellent potency and continence preservation with adequate short-term cancer control," Abreu tells Physics World. "This study provides the initial US HIFU data to prostate cancer stakeholders, including clinicians and patients. We hope these positive data encourage urologists to offer focal HIFU ablation to effectively address prostate cancer without the intrinsic side-effects of radical treatments. Physicians should discuss in detail with their patients about all potential treatment options for prostate cancer, to ensure that they receive personalized care that addresses patients' individual needs according to the disease they have."

23 Sep 2020

Cynthia E Keen *is a freelance journalist specializing in medicine and healthcare-related innovations*

Source: https://physicsworld.com/a/focused-ultrasound-treatment-preserves-quality-of-life-for-prostate-cancer-patients/

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Immunotherapy for Prostate Cancer Offers Hope

In patients with metastasized, castration-resistant prostate cancer an antibody for treating advanced prostate cancer improves progression-free survival, revealed finding of the long-term analyses of an international phase 3 clinical trial.

This is the finding of the long-term analyses of an international phase 3 clinical trial, recently published in the leading journal European Urology. The study showed that overall survival was 2 - 3 times higher than in the placebo arm.

Ipilimumab is a humanised monoclonal IgG1 antibody that is active against CTLA-4. CTLA-4 is a molecule that controls part of the immune system by down-regulating it. "Cancer cells can evade the endogenous defence of the immune system by deactivating it. An antibody that targets CTLA-4, a so-called checkpoint inhibitor (CPI), can block this deactivation, thereby reactivating the immune system once again.

This reactivated immune response can then help the body to destroy cancer cells," explains oncologist Michael Krainer from the Department of Medicine I at MedUni Vienna/Vienna General Hospital and from the Comprehensive Cancer Center (CCC). The internationally renowned "Urological Tumours" working group from the division led by Krainer was invited to participate in the first global clinical phase 3 trial of a CPI in prostate cancer CA184-043, the long-term results of which have now been published in European Urology, the world's most influential urology journal.

The recent trial included a total of 799 men. It was conducted globally: in the USA, Canada, South America, Australia and European countries. Patients were randomised in a 1:1 ratio to receive bone metastasis radiotherapy (a single 8 Gy fraction) followed by either ipilimumab 10 mg/kg or a placebo every three weeks via up to four injections.

Although in the first planned analysis, the survival advantage in the treated group was present it was not significant, whereas the recent analysis shows that long-term survival after 3, 4 and 5 years is two - three times higher in the immunotherapy arm as opposed to the placebo arm.

Ipilimumab is already licensed by the European Medicines Agency to treat melanoma, lung cancer and bladder cancer. However, there is still a lack of reliable data for approval to treat prostate cancer, since the first planned analysis did not show any significant survival advantage.

In the light of the new long-term results, Krainer says: "Immunotherapy is highly promising and can be used, for example, when chemotherapy options have been exhausted or are undesirable. It can also be expedient to start it at an early stage, since any treatment is more effective if there is little cancer present and the patient is in good general health.

We are the first group in Austria to gain such valuable experience and we are now attempting to incorporate immunotherapy into the treatment in the context of international clinical trials."

The working group will soon start on two study protocols using immunotherapy before a chemotherapy that is currently the standard treatment for patients with castration-resistant prostate cancer.

Source: www.medindia.net/news/immunotherapy-for-prostate-cancer-offers-hope-197894-1.htm

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Top Ten Facts About Prostate Cancer

1. Prostate cancer is one of the most controversial cancers in both diagnosis and treatment.
2. If you're cursed with a cancer - this is the one to ask for!!
3. Prostate cancer is more aggressive in a black person than a white person
4. This is the second commonest cancer that affect men after lung cancer
5. The risk of developing prostate cancer increases after the age of 50 years. Majority of prostate cancer are diagnosed in men over 65 years.
6. There are over 2 million American men currently living with prostate cancer.
7. Charles B. Huggins in 1941 was awarded a Nobel prize for understanding that prostate cancer was dependent on testosterone for its growth and spread and this could be reversed by giving estrogens, the so called 'Chemical Castration'.
8. Prostate Specific Antigen - a marker to diagnose prostate cancer was first used in forensic investigation to determine if a stain on the undergarment was due to semen or not.
9. The use of 'robotics in surgery' is most commonly deployed for removing a malignant prostate cancer from the pelvis.
10. Prostate cancer is a relatively slow-growing cancer. For all stages of the cancer the average 5-year survival rate is 98% and the 10-year survival rate is 84%. Remember - Most people die with this cancer and not of it.

Source: www.medindia.net/health_statistics/health_facts/prostate-cancer-top-facts.htm

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Postoperative Radiotherapy Can Be Avoided In Many Patients, Finds Lancet Study

Researchers have found in a new study that individualised post operative radiotherapy with closed monitoring is key to better outcomes in prostate cancer.The GETUG-AFU 17 trial has been published in The Lancet Oncology.

The authors recommend that patients should be closely followed after surgery for treating localised and locally advanced prostate cancer. If the cancer shows early signs of coming back, men should be offered radiotherapy. They say that changing treatment policy in this way may offer the opportunity to spare many men radiotherapy and its associated side effects.

Dr Claire Vale, who led the systematic review and meta-analysis, from the MRC Clinical Trials Unit at University College London, UK, said: "Our findings suggest that following surgery, patients whose cancer is confined to the prostate, or has spread only to nearby tissues or organs, can safely be spared routine post-operative radiotherapy and its associated side effects. Radiotherapy need only be given to men if they show early signs that the cancer may be returning." [1]

"Guidelines and policy regarding the standard of care for prostate cancer should be updated based on the findings of this review of the three new trials." [1]

The authors of the new study identified three trials comparing relevant radiotherapy approaches and prospectively planned a systematic review and meta-analysis to combine their results. The trials include data from France, Australia and New Zealand, and the UK, Canada, Denmark and Ireland, which investigate the optimal timing of radiotherapy after removal of the prostate, which, until now, had remained unclear.

The meta-analysis assessed results from 2,153 men enrolled across the three trials, with median follow-up of at least five years. 1,075 men were randomised to receive adjuvant radiotherapy following surgery, and 1,078 men to early salvage radiotherapy, where treatment is delayed until first signs of disease progression. Only 421 (39%) men had started early salvage radiotherapy at the time of analysis. Patients had a median age of around 65 years, and most (78%) had a Gleason score of 7.

The authors found that routinely giving patients adjuvant radiotherapy after surgery does not improve outcomes after five years, compared with early salvage radiotherapy (event-free survival was 89% for adjuvant radiotherapy and 88% for early salvage radiotherapy).

The authors will continue to monitor outcomes from the trials and plan further meta-analyses to compare longer-term effects.

The largest of the three new trials included in the meta-analysis, RADICALS-RT, published in The Lancet, randomly assigned 1,396 men with a median age of 65 to either adjuvant radiotherapy (697 men) or early salvage radiotherapy (699 men). Patients were enrolled in Canada, Denmark, Ireland and the UK, and were followed for an average of 5 years.

The authors found that people who underwent adjuvant radiotherapy had more side effects than those who had early salvage radiotherapy, including restricted flow of urine from the bladder (10%, 62/599 patients vs 6%, 35/621 patients) and increased blood in the urine (16%, 94/599 patients vs 4%, 27/621 patients) two years after treatment began. Study first author Prof Chris Parker, from The Royal Marsden NHS Foundation Trust and Institute of Cancer Research, London, UK said: "The results suggest that radiotherapy is equally effective whether it is given to all men shortly after surgery or given later to those men with recurrent disease. There is a strong case now that observation should be the standard approach after surgery and radiotherapy should only be used if the cancer comes back."

"The good news is that in future, many men will avoid the side-effects of radiotherapy," added Parker. "These include urinary leakage and narrowing of the urethra, which can make urination difficult. Both are potential complications after surgery alone, but the risk is increased if

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radiotherapy is used as well." The effect of radiotherapy timing was assessed by recording patients' first disease event (e.g. a PSA level of at least 2ng/ml) after treatment. While it was not yet possible to determine the long-term effectiveness of adjuvant radiotherapy and early salvage radiotherapy at preventing the spread of the disease, the authors will continue to investigate this.

The conclusions will not apply to all patients having surgery for prostate cancer. Those with very low risk localised disease are not currently considered for radiotherapy, whereas those with the highest chance of prostate cancer spreading would routinely be offered radiotherapy after surgery.

In the future, RADICALS will also report on the effect of giving hormone therapy - which may delay progression - alongside radiotherapy.

The GETUG-AFU 17 trial, published in The Lancet Oncology, enrolled 424 men with a median age of 64 from 46 hospitals in France. Patients were randomly assigned to adjuvant radiotherapy or early salvage radiotherapy, both combined with short-term hormonal therapy to prevent cancer cells receiving the testosterone they need to grow. People who underwent adjuvant radiotherapy had more overall side effects than those who had early salvage radiotherapy (87%, 184/212 patients vs 44%, 93/212 patients).

The RAVES trial, published in The Lancet Oncology, enrolled 333 patients with a median age of 64 in Australia and New Zealand. Patients were randomly assigned either adjuvant radiotherapy or early salvage radiotherapy. Men in the adjuvant radiotherapy group had more overall side effects than those who had early salvage radiotherapy (70%, 116/166 patients vs 54%, 90/167 patients).

The RAVES and GETUG-AFU 17 trials were smaller than RADICALS-RT. Each alone had more limited statistical power. Combined with results from RADICALS-RT in the ARTISTIC meta-analysis, however, they provide strong support for the use of early salvage radiotherapy rather than adjuvant radiotherapy for most men, which could spare many patients from needing radiotherapy. Clinical guidelines have offered conflicting advice as to which patients are offered radiotherapy following surgery.

https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31553-1/fulltext
the lancet radiotherapy prostate cancer surgery hormonal therapy
Source : The Lancet Oncology

2 Oct 2020

By Dr Kartikeya Kohli M.B.B.S, DNB (Internal Medicine), MRCP F.A.G.E, Fellow DNB (Nephrology) Consultant Physician with Special Interest in Nephrologist Sitaram Bhartia Institute of Science and Research Qutab Institutional Area, New Delhi 110016.

Source: https://medicaldialogues.in/urology/news/prostate-cancer-postoperative-radiotherapy-can-be-avoided-in-many-patientsfinds-lancet-study-70130

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Molecular Switch Links High-Fat Diet to Prostate Cancer Metastasis

A new study in mice has revealed a molecular link between a high-fat diet and the growth and spread of prostate cancer. The findings raise the possibility that changes in diet could potentially improve treatment outcomes in some men, the study leaders believe.

In the study, the researchers also showed that an anti-obesity drug that targets a protein that controls fat synthesis could potentially be used to treat metastatic prostate cancer.

The study, funded by NCI, was published in Nature Genetics on January 15.

Population studies have long suggested that diet influences prostate cancer risk, including the risk for developing metastatic cancer. For example, until recently, the disease was relatively rare in Asia, where diets have been typically lower in fat than in the West. Studies have shown, however, that when men emigrate from Asia to the United States and adopt western dietary habits, their risk for prostate cancer rises to that of other Americans.

This new study is important because it details specific molecular changes induced by a high-fat diet in cells and animals and shows the impact on prostate cancer metastasis, said Yusuf Hannun, M.D., director of the Stony Brook University Cancer Center in New York, who studies lipids and their role in cancer but was not involved in the study.

Insights from a Mouse Model

The study's lead author, Pier Paolo Pandolfi, M.D., Ph.D., of Beth Israel Deaconess Medical Center, has studied a tumor suppressor gene called PML for almost 30 years, since he helped discover it and its association with leukemia. The new study began when his research group observed that PML is deleted (or lost) in 20% of human metastatic prostate cancer and decided to test whether turning the gene off in mice promotes prostate cancer.

Another tumor suppressor gene called PTEN has long been known to be important in prostate cancer; the gene is at least partially lost in 70% of human prostate cancer, and complete loss of the gene is common in metastatic prostate cancer.
The researchers at Beth Israel had a line

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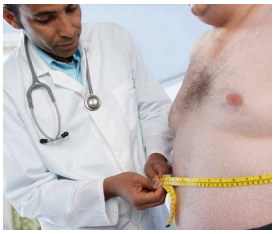
of mice bred to lack the PTEN gene. These mice did tend to eventually develop prostate tumors, but the tumors were not invasive. The research group decided to see if knocking out PML in the mice that already lacked PTEN would speed up prostate cancer growth.

"The first surprise was that PML loss not only accelerates the development of prostate cancer, but it accelerates the metastatic spread of prostate cancer," Dr. Pandolfi said. Metastatic prostate cancer had rarely been seen in mice before, he explained.



When the researchers compared the non-metastatic tumors in the PTEN-lacking mice with the metastatic tumors in mice that also lacked PML, they found that the metastatic tumors were full of fat. They repeated the experiment in cultured human cells. Looking deeper into the mice and human cells' biochemical pathways, the researchers found that the loss of PML had activated a protein called SREBP, a central regulator of fat pathways in the body, and made the cells churn out fat molecules.

If losing PML leads prostate cancer cells to make fat and metastasize, could fat from the diet also promote prostate cancer, Dr. Pandolfi's team wondered.

"Epidemiologically, there is extremely compelling data that if you are obese or eat a certain diet, for example a fast-food diet, you are at risk of developing cancer and of developing aggressive cancer," Dr. Pandolfi said. It suddenly occurred to him that the reason metastatic prostate cancer was rarely seen in mouse models might be because lab mice tend to eat a vegetable-rich chow that is low in fat and sugar.

The research group decided to swap out the vegetable-rich chow for lard-laden pellets. "The shocking, eye-opening outcome of this was that all the mouse models, even those that hadn't lost PML and never metastasized on chow, started developing aggressive and metastatic prostate cancer," Dr. Pandolfi said.

Targeting Fat Pathways

Lipids have a complex and important role in maintaining normal cell structure and function. "However, too much lipid is not good for the cell," said Rihab Yassin, Ph. D., a program director in NCI's Division of Cancer Biology. "This study outlines an important mechanism by which high fat promotes aggressive and metastatic prostate cancer. It also underscores the role of the tumor suppressor gene PML in regulating cellular [fat production] and how PML loss could drive an aggressive disease."

In animal models, high-fat diets have been found to increase the risk for several cancers, including prostate, mammary, and colon cancers, said Dr. Hannun. But, he added, the new study provides a mechanism by showing that, like the loss of PML, a high-fat diet can trigger the uncontrolled activity of SREBP.

"The good news for patients is that a number of pharmaceutical companies have developed drugs that target SREBP to treat obesity," said Dr. Pandolfi. His group treated mice bearing prostate tumors with one such drug, called fatostatin. They found that fatostatin (which has not been approved by the Food and Drug Administration for any use) blocked both prostate tumor growth and metastasis in mice with SREBP overactivity caused by PML loss.

Soon after the findings from this study were published, Dr. Pandolfi was contacted by companies that produce other SREBP inhibitors intended to treat obesity and are interested in investigating whether the drugs could be repurposed for a role in cancer treatment.

The Complexities of Diet

The study shows that the body's internal fat production processes are an important part of the life history of cancer cells, but the study doesn't definitively show that a high-fat diet rather than obesity is what promoted cancer, Dr. Hannun said. Jill Hamilton-Reeves, Ph.D., a nutritionist who studies prostate cancer at the University of Kansas Medical Center, agreed.

In addition, "it is important to note that the two different diets fed to the mice differed in more ways than just the percent fat content," she said, adding that the mice on a high-fat diet consumed 60% of their calories from fat, well above the 20%–40% of calories from fat in the average Western diet.

She pointed out that, in addition to lard, the high-fat pellets contained sugar, starch, and many other ingredients not found in the regular chow, which contained healthier ingredients such as whole wheat, fish meal, and wheat germ. The mice on the high-fat diet quickly gained weight, while the mice on the control diet maintained their weight.

"Overall diet patterns generally are more relevant to health than any single isolated nutrient," Dr. Hamilton-Reeves said.

"We need to understand which fat is good, which fat is not," said Dr. Pandolfi. He can envision a future of precision medicine for patients with cancer that includes specific recommendations for diet. Based on a cancer's genetic mutations and metabolic profile, a patient might be advised to eat or avoid certain foods, take a particular medicine, or proceed with surgery.

"The core of the story is that we have a mechanism," Dr. Pandolfi said. "You can see the interplay between the environment and genes." At that interface, helpful interventions seem within reach, he added.

February 22, 2018, by NCI Staff

Source: https://www.cancer.gov/news-events/cancer-currents-blog/2018/high-fat-diet-prostate-metastasis

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The Anti-Cancer Powers of Celery and Parsley

Unlike flashier "super foods" we hear about daily, parsley and celery get no respect. Parsley is tossed on a steak plate as garnish. Celery is dunked in Bloody Mary drinks at the brunch table but not used in much else.

It's unfortunate these foods have a reputation as empty calories, because they contain a nutrient being studied for its ability to fight cancer.
Existing cell and animal research shows apigenin:

- Supports the function of tumor-suppressor genes.
- Improves cell-to-cell communication.
- Hinders gene activity known to promote cancer cell growth.
- Curbs new blood vessel development around cancer cells.
- Promotes cancer cell death.
- Improves efficacy of chemotherapy drugs.

Population studies in humans also suggest a connection between regularly eating apigenin-containing foods and reduced risk of several cancers.

The Mediterranean diet, which is widely studied for its ability to reduce risk of chronic diseases, including cancer, is naturally full of foods containing the nutrient.

Nutrients vs. Cancer

Decades of research support the cancer-preventive role plant foods play. A dietary pattern based around plants reduces cancer risk.

You don't need to be a vegetarian to benefit. All you need to do is fill around two-thirds of your plate with whole plant foods such as vegetables, fruit, nuts, beans and whole grains. Fill the rest with animal foods.

Plants appear to reduce risk in part because of the phytonutrients they contain. "Phyto" means plant, so phytonutrient means nutrients found in plants.

There are thousands of phytonutrients, including many familiar players, such as beta-carotene and chlorophyll, a substance found in all green plants, in the foods we eat.

Apigenin is just one of many promising, cancer-fighting nutrients.

Variety Is Important

Apigenin belongs to a family of food substances often touted as "cancer fighters," which also includes nutrients found in red wine, green tea and dark chocolate.

Parsley, chamomile tea and celery are excellent sources of apigenin and related nutrients. Other herbs — mint, oregano, thyme, cloves, lemon balm and sage — also contain it.

Additional places you'll find the nutrient include artichokes, onions, oranges, tea, spinach, rutabagas and lettuce. Foods containing apigenin are good additions to most diets.

However, nearly all nutrients studied for anti-cancer activity can be good extras to an eating plan. Fill your plate with plants of all colors, shapes and flavors.

By Suzanne Dixon, MPH, MS, RDN
Oncology Medical Writer May 1, 2018

Suzanne Dixon is a registered dietitian, epidemiologist and experienced medical writer. She has volunteered with the National Cancer Policy Forum, Oncology Nutrition Dietetic Practice Group, American Institute for Cancer Research, American Society for Clinical Oncology, The National Academies of Sciences, Engineering, and Medicine. The New York Times and Time Magazine also have reviewed her cancer patient resources.

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The sources on all content featured in The Mesothelioma Center at Asbestos.com include medical and scientific studies, peer-reviewed studies and other research documents from reputable organizations.

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Public meetings cancelled until 2021

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