East Lancashire Prostate Cancer Support Group Newsletter





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Solving prostate cancer conundrum

25 March 2018, 07:30am / GREG Boustead The Independent on Saturday

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DURBAN - The brave article written by Spike Farrell in The Independent on Saturday last month on his struggle with prostate cancer and the pain he is suffering has resonated with many people around South Africa. I am not surprised by this.

Prostate cancer is the leading cancer in males: nearly one in five men will be diagnosed with the illness during their lifetime and, in South Africa, more than 4500 men are diagnosed with it every year.

However, only 3-4% of men will ulti-

mately die of prostate cancer.

This conundrum of prostate cancer puzzles urologists, oncologists and researchers and is the focus of massive global research studies.

The majority of men die with their cancer, as opposed to dying from their cancer.

Why is this? The main reason is that prostate cancer is primarily a disease of ageing, with most men dying of other causes. Second, low-risk, small prostate cancers are very common in males and the majority of these have little ef-

fect on these men's life expectancy.

Roughly half of newly diagnosed early prostate cancer are these low-risk cancers. These patients will do well with whatever therapy they choose. In fact, a significant proportion of older men are suitable for a treatment option called "active surveillance". Here, the cancer is simply monitored regularly for signs of progression, and curative therapy can still be offered if they show signs of the cancer progressing.

Studies show the risks with this approach to be very



small.

Patients on active surveillance enjoy normal sexual and urinary function, albeit they require regular follow-up.

We know, however, that not all men cope with this psychologically, and they do better with early curative treatment. Sadly, however, active surveillance is under-utilised around the world, particularly in older men.

Radiation

The other 50% of newly diagnosed early prostate cancers are called intermediate or high-risk cancers.

These cancers need radical treatment, with either surgery to remove the entire prostate, called radical prostatectomy, and radiation alternatives, either with external beam or seed brachytherapy.

For men and their families faced with this decision, there is often great confusion, with information overload, particularly from the internet, where a Google search can easily yield 100000 results.

This is not helped by biases depending on which specialist they see.

What is very clear, however, is that patients with early prostate cancer who are given the opportunity to discuss all available treatment options and are actively involved in their treatment decisions, experience less uncertainty and regret about their decisions and have better satisfaction with the chosen treatment. Knowledge about their disease helps empower patients and carers, particularly when they face complications and side effects of therapy.

It is a sad reality that many men are unaware of the risks they face with regard to this disease. More concerning to me is the fact that many patients are not fully informed about the benefits and side effects of different treatments.

Robotic-assisted radical prostatectomy is the most commonly performed treatment in Europe, the UK and US, with 70-80% of men choosing this surgical option. The situation in South Africa has until recently been quite different, with brachytherapy being the dominant treatment.

Professor Andre van der Merwe, head of urology at the University of Stellenbosch and one of South Africa's top urologists, found in a 2015 study that the use of brachytherapy in South Africa was 73% above the internationally accepted norm, and that South Africa had one of the highest brachytherapy rates in the world.

Check-up

Global patterns show that brachytherapy is used on between 5-15% maximum to treat prostate cancer sufferers.

In the US, brachytherapy has declined to just above 5%, with other types of radiation, such as proton beam therapy, becoming more common. The situation in South Africa is changing rapidly where robotic surgery has increased from 17% in 2014 to 42% in 2016, and about 50% in 2017.

Men are notorious for visiting their doctors less frequently than women and for ignoring the early warning signs. Men often think they are "bullet-proof", but need to make sure they have regular check-ups. This includes doing screening for cardiovascular risk factors such as high blood pressure and high cholesterol. It is also crucial for men to ensure they are informed about the illness and its risks.

Men over 40 should speak to their doctors about screening for prostate cancer, particularly if they have a family history of prostate cancer on their father's side or breast or ovarian cancer on their mother's side, which would make them more at risk. Black African males are also at increased risk. Besides getting checked regularly, make sure you create a lifestyle for yourself that helps to decrease prostate and other cancer risks.

Give up smoking, moderate alcohol intake and take regular exercise. Stick to a diet low in animal and saturated fat and including fresh fruit and vegetables.

If you're elderly, watch for changes in the "waterworks". If you pass urine more frequently in the day or night, or if your urine flow gets weaker or you have pain or blood on urination, get checked straight away.

Prostate cancer screening using a blood test known as PSA can reduce the risk of prostate cancer death by up to 20%. Targeted screening of men with a PSA blood test at age 50 and again at 60 can detect a significant proportion of prostate cancers.

The past 10 years have seen great strides made in the diagnosis and treatment of prostate cancer. New imaging techniques using MRI scans can detect potentially lethal cancers, and new bio markers for detecting dangerous cancers are being improved all the time. There have also been great advances in new drugs for advanced prostate cancer which have improved survival chances and quality of life for men.

I'd like to thank Mr Farrell for his bravery in speaking out and inspiring men to take ownership of their own health. Cancers often need poster boys to raise the profile of the disease and get the real issues out in the open and discussed. The more we can educate the public, the more strides we'll make in empowering patients to be actively involved in their treatment decisions.

* Dr Greg Boustead is urological and robotic surgeon at Netcare Chris Barnard Memorial Hospital, Cape Town & Waterfall City Hospital in Midrand, South Africa.

Metabolic profiling may determine aggressiveness, prognosis of prostate Cancer

March 26 2018 Massachusetts General Hospital

A new approach to analyzing prostate gland tissue may help address a major challenge in treating prostate cancer -- determining which tumors are unlikely to progress and which could be life threatening and require treatment. In their report published in the journal Scientific Reports, Massachusetts General Hospital (MGH) investigators describe how cellular metabolites -- proteins produced as the results metabolic processes -- in apparently benign tissues from cancerous prostates not only can determine the grade and stage of the tumor but also can predict its risk of recurrence.

"Prostate cancer detection through elevated PSA levels followed by prostate tissue biopsies often cannot differentiate between patients with early-stage, indolent disease and those with aggressive cancers," says Leo L. Cheng, PhD, of the MGH Departments of Radiology and Pathology, co-corresponding author of the report. "The additional metabolic information provided by magnetic resonance spectroscopy can help guide treatment strategy, both to prevent overtreatment of slow-growing tumors -- a critical and widely recognized current issue -- and to identify the aggressive tumors for which additional treatment should be considered."

It has been estimated that more than 70 percent of men who receive a prostate cancer diagnosis after PSA (prostate-specific antigen) screening and biopsy are likely to have less aggressive tumors that will have little impact on their future health, but around 17 percent have aggressive, potentially fatal disease. Traditional histologic analysis of prostate gland biopsies -- which may miss the most informative tissues -- classifies tumors based on their cellular structural appearance and cannot distinguish dangerous tumors from those that can safely be monitored through watchful waiting.

When an elevated PSA level indicates the possible presence of prostate cancer, tissue biopsies are often taken from random sites within the gland, which can result in some samples with tumor tissue and some in which all tissue may be benign. The MGH team used magnetic resonance spectroscopy (MRS), which reflects biochemical activity within tissues, to analyze samples of benign prostate tissues from more than 150 men with a confirmed prostate cancer diagnosis that had led to complete removal of the prostate gland. Since this was a retrospective study of patients diagnosed up to 15 year ago, the researchers had access to both pathological analysis of the entire prostate gland and the eventual outcome for each patient.

The team first analyzed benign samples from 82 patients to identify any metabolic changes that appeared to reflect key prognostic factors -- tumor grade, which reflects overall prognosis; stage, how far the tumor has spread, and the likelihood of recurrence. They separately analyzed samples from the remaining 76 patients and found the same associations between metabolite levels, grade/stage and recurrence risk. Specifically, metabolic profiles of what appeared to be benign prostate tissue were able to differentiate more aggressive from less aggressive tumors and tumors found throughout the prostate gland from those confined to a limited area. Levels of a metabolite called myo-inositol -- known to be a tumor suppressor -- were elevated in the tumors of patients with highly aggressive cancers, the significance of which is yet to be determined.

"Measurement of a tumor's metabolic activity in the initial biopsy, even in histologically benign tissue, could help to determine whether a patient should have a prostatectomy or, for those with less aggressive disease, could enter active surveillance with peace of mind," says Cheng, an associate professor of Radiology at Harvard Medical School. He and his team are now analyzing samples from more than 400 additional prostate cancer cases and working to refine the field of metabolites that provide information valuable for treatment planning.

Story Source:

Materials provided by <u>Massachusetts General Hospital</u>. Note: Content may be edited for style and length.

Journal Reference:

Lindsey A. Vandergrift, Emily A. Decelle, Johannes Kurth, Shulin Wu, Taylor L. Fuss, Elita M. DeFeo, Elkan F. Halpern, Matthias Taupitz, W. Scott McDougal, Aria F. Olumi, Chin-Lee Wu & Leo L. Cheng. Metabolomic Prediction of Human Prostate Cancer Aggressiveness: Magnetic Resonance Spectroscopy of Histologically Benign Tissue. Scientific Reports, 2018

Endocyte making progress on prostate cancer therapy Endocyte making progress on prostate cancer therapy

Posted by Cameron Hardin wIfi.com

WEST LAFAYETTE, Ind. (WLFI) - West Lafayette based Endocyte is moving forward with its prostate cancer therapy.

"We solve problems with urgency because patient's lives depend on it," said CEO Mike Sherman. It's been a busy six months for Sherman and biotech company Endocyte. In October of 2017, they acquired a late stage cancer therapy for \$12 million.

"Since that time, the team has really been working hard to execute a number of initiatives," said Sherman. "That included primarily a discussion with the FDA and the design of a protocol that we would follow for that trial."

The therapy is an injected highly targeted radio therapy.

"The therapeutic is actually delivering a beta particle which once delivered eventually binds with the target on the tumor cell," said Sherman. "It will then emit that beta particle and kill the cancer cell."

The design of the trial is for 750 patients to receive the therapy.

"You tend to start in the more advanced disease," explained Sherman. "So, those patients tend to be sicker, they tend to have run out of options. What you hope for is extended survival and improved quality of life."

Sherman said the success of the trial is crucial for patients and also the company.

"The execution of a clinical trial, there's a lot of work that goes into that," said Sherman. "The difference between doing it well and not doing it well can mean years in the development effort." Sherman says the trial is set to run until 2021. However, there is a possibility that could be shortened with early success.

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From Left to Right Hazel Goulding (Treasurer) Leon D Wright (IT Admin) Stuart Marshall (Secretary) Steve Laird (Vice Chairman) Dave Riley (Chairman)

We are a group of local people who know about prostate cancer. We are a friendly organisation dedicated to offering support to men who have had or who are experiencing the effects of this potentially life threatening disease.

The East Lanc's Prostate Cancer Support Group offers a place for free exchange of information and help for local men and their supporters (family and friends) who may be affected by this increasingly common form of male cancer.

At each meeting we strive to be a happy, supportive and upbeat group of people; encouraging open discussion on what can be a very difficult and perhaps for some an

Next Meeting Will Be Thursday 5th April 2018 2:00pm—4:00pm Mackenzie Building Burnley General Hospital











