Prostate Cancer Research

Newsletter I November 2012

Prostate cancer - a weighty problem

We are frequently told in the media that obesity can be a threat to our health. Recent findings from research conducted by Cancer Council Victoria have shown that perhaps we should heed this message when it comes to prostate cancer as well.

Cancer Council Victoria has been privileged to work with over 40,000 Melbourne residents over the last two decades, following the course of their lives and their state of health. This long term research, the Health 2020 study, has investigated the ways our lifestyles and genes effect our chances of developing cancer and other diseases.

Studying the health of 16,000 men from the Health 2020 study, over a period of 15 years, Cancer Council Victoria researchers revealed some important findings about body weight and prostate cancer.

"It's a classic case of good news and bad news," said Dr Julie Bassett, Health 2020 researcher.

The good news: being overweight at the age of 18 years did not make it more likely that a man would develop prostate cancer later in life."

The bad news: large weight gains after the age of 18 years were associated with increased risk of developing a dangerous form of prostate cancer or dying from prostate cancer.

Men who had gained 20 kg or more since the age of 18 years (about a quarter of the men in the study) had a 37% higher risk of developing an aggressive form of prostate cancer.

They also had almost double the risk of dying from prostate cancer compared with men who gained less than 5 kg since the age of 18.

Study update

The Prostate Cancer Program's study of aggressive prostate cancer has been boosted by an excellent response from Victorian men.

Since the study commenced in 2010, 432 men diagnosed with prostate cancer have agreed to take part in the study.

These affected men have also been joined by 263 men who had investigations for prostate cancer but who were cancer free.

The unaffected men are an important part of the research providing a point of comparison.

In recent times we have also been inviting unaffected brothers of men with aggressive prostate cancer to join the study. There has been an enthusiastic response with 86 brothers having agreed to take part.

However, while the progress is very good, we still need to recruit more people into the study, and will be continuing to invite new participants until 2014 .

Who do we need?

- Men who have been diagnosed with aggressive prostate cancer
- Brothers of affected men
- Men who have been tested for prostate cancer but were found to be free
- People who have four or more family members with prostate cancer

If someone you know is interested in taking part they can contact the Prostate Cancer Program Manager on (03) 9635 5127 to register interest or get more information.

Cancer Council Victoria, Cancer Epidemiology Centre, 1 Rathdowne Street Carlton Vic 3053

Promising findings

Assoc Prof Gianluca Severi

One of the challenges facing men who have been diagnosed with prostate cancer is deciding whether or not to have treatment. Recent findings by Cancer Council Victoria suggest that help in making this decision might not be far away.

When a man is diagnosed with prostate cancer, he and his medical practitioner are faced with a big decision. Whether to treat straight away or, as most of these cancers don't become dangerous, wait to see if it develops. This is not an easy decision. He can decide to receive treatment and run the risk of negative side effects such as impotence or incontinence, or he could delay and suffer the anxiety of waiting to see if the tumour becomes dangerous.

It would be much better if these decisions could be guided by tests that predict the likelihood of the cancer developing into a dangerous form.

Such tests could reduce the unnecessary treatment of cancers that would have never become dangerous, and relieve the anxiety associated with "watchful waiting".

While these tests are not yet available, Cancer Council Victoria researchers have made important advances towards this aim.

"We have managed to identify a number of proteins that are linked to the likelihood of whether or not a prostate cancer will develop into an aggressive form," reports Associate Professor Gianluca Severi, Deputy Director of the Cancer Epidemiology Centre.

"We found that men whose cancers developed into the dangerous form had low levels of one particular protein and high levels of two other proteins in the tumour cells at the time the cancer was diagnosed."

While it is early days yet, these findings give hope that it might eventually be possible to screen for the presence of these proteins in men diagnosed with prostate cancer.

It is hoped that this information would allow a decision to be made as to whether the cancer is likely to become dangerous and therefore whether or not to treat.

PSA testing

These findings might also resolve another dilemma - whether all men should routinely be screened for prostate cancer using the PSA test.

As you might be aware, the issue has made its way on to the pages of daily newspapers here in Australia and across the globe in recent times.

The PSA test looks for the presence of a particular protein in the blood. High levels of the protein are frequently, although not always, associated with the presence of a tumour of the prostate gland.

The controversy has arisen because, while the PSA test can lead to the detection of prostate cancer, without a test to tell us whether it will become aggressive, this knowledge can lead to the problem of unnecessary treatment.

A prominent U.S. government advisory panel recently raised doubts about the advisability of routine PSA testing for men of all ages. It argued that the serious side effects of treatments in men with non-aggressive prostate cancer outweighed the benefits of testing for the disease.

If a test for prostate cancer aggressiveness can be developed from findings such as those reported by Cancer Council Victoria, the routine use of the PSA test for cancer screening would be more acceptable. The choice about whether or not to treat the detected cancer would be better informed, and unncessary treatment less likely to occur.

"We urgently need a test to tell whether a prostate cancer is likely to become dangerous. Our recent findings give us

Assoc Prof Gianluca Severi
Deputy Director Cancer Epidemiolgy Centre

The fingers are pointing

David Muller

A Cancer Council Victoria study of finger length and prostate cancer has shown that there are questions still to answer.

It has long been known that there is a difference between men and women with regards the relative length of their index and ring fingers. For women the ring finger tends to be shorter than the index finger, for men the ring finger tends to be longer than the index finger.

It is thought that this difference is due to male babies being exposed to higher levels of the male hormone, testosterone, in the early stages of pregnancy.

Recent international research has suggested that this finger length difference is a predictor of prostate cancer with longer ring fingers indicating greater risk and shorter ring fingers reduced risk.

The Cancer Council Victoria researchers attempted to confirm these results and studied more than 6,000 men, 686 of whom were diagnosed with prostate cancer. Unlike the previous studies, they found that there was no strong evidence that longer ring fingers were associated with high risk of prostate cancer.

However, they did find that men who had relatively short ring fingers appeared to be less likely to have a diagnosis of prostate cancer before the age of 60 years.

"These findings suggest that although it is possible that exposure to high levels of testosterone in early pregnancy increases the risk of prostate cancer, any difference in risk is likely to be small," commented Cancer Council Victoria researcher, David Muller.

"Further research is needed to clarify any association between finger length and prostate cancer, especially for younger men."

David Muller, Research Statistician, Cancer Council Victoria

New team member

The Cancer Council Victoria welcomes a new member to the team.

Alison Dowling has recently joined the Prostate Cancer Research Team.

Alison will be Program Manager for the next twelve months. She comes to us from the Cancer Council Queensland where she was manager of their Lung Cancer Project.

Alison very much appreciates the opportunity to be able to contribute to Cancer Council Victoria's Prostate Cancer Program.

Alison Dowling

For more information about Prostate Cancer or other cancers

Cancer Help Line. – A telephone service providing advice, support and information to cancer patients, survivors, family and friends. Phone 13 1120

Help us stay in touch

We would like to keep you posted on how the studies are progressing and new activities that are underway.

Please tear off this strip and send it to us when you move, change your name, telephone number or email address.

First name Mr/Ms/Mrs/Miss

Middle name

Last name

Phone

Email

NEW ADDRESS

Suburb

State Postcode

OLD ADDRESS

Suburb

State Postcode

Mail to:
Prostate Cancer Program, Cancer Council Victoria, Reply Paid 83943
CARLTON VIC 3053

OR email your details to:
prostate.study@cancervic.org.au

OR phone your details to:
(03) 9635 5127

Remembering forgotten cancers

The Cancer Epidemiology Centre, which runs the Prostate Cancer Program, recently launched another large-scale study which focuses on the causes of less commonly occurring cancers.

Over the past 2 to 3 decades, extensive research has been conducted on common cancers such as breast cancer and prostate cancer. However, recent statistics show that over half of all cancer deaths in Victoria are from less common cancers, and these receive relatively little research attention.

The Cancer Epidemiology Centre is developing a major new study to investigate these cancers that have been forgotten by the research community.

Around 30,000 people will be able to volunteer for the Forgotten Cancers Project. The aims of the study are to:

- understand the causes of less common and/or under-researched cancers;
- establish ways to detect these cancers earlier; and
- develop prevention campaigns to reduce people's risk.

Australians over 18 years of age, who have been diagnosed with one or more rare cancers are invited to participate.

Some of these cancers are non-Hodgkin lymphoma, leukaemia, multiple myeloma, kidney, bladder, stomach, brain, liver, oesophagus, pancreas, uterus, thyroid, gallbladder, small intestine and bone cancer.

Participants will be asked to complete a questionnaire about topics such as lifestyle factors, family history of cancer and medical history. They will also be asked to give DNA from either saliva or blood samples.

Cancer Epidemiology Centre Deputy Director, Associate Professor Gianluca Severi, encourages people who have been diagnosed with one or more of these cancers to participate.

"Due to the very low incidence of some cancers, such as small intestine cancer, we're going to need as many people as possible with a diagnosis to take part,"

Assoc Prof Gianluca Severi
Deputy Director Cancer Epidemiolgy Centre

If someone you know is interested in participating in the Forgotten Cancers Project they can visit www.forgottencancers.com.au or call Sam on 1800 068 289 for more information.

Would you like to receive your newsletter via email in the future?

Just type into your email subject line: "e-news please" and include your name and address

Send to: **prostate.study@cancervic.org.au**