

# PROSTATE CANCER ACTION GROUP (S.A.) INC

Affiliated with  
Prostate Cancer Foundation of  
Australia



ABN 26 499 349 142

## NEWSLETTER

The views expressed in this newsletter are not necessarily those of the Group. This newsletter is produced for the benefit of members of this Group, for general information, and articles are not intended as professional advice. This Group does not provide professional advice, nor does it endorse any particular product or service. It is recommended that any person needing advice on any health matter should consult their health professional without delay.

WEBSITE [www.pcagsa.org.au](http://www.pcagsa.org.au)

### MARCH 2005

#### Chairman's Report – March 2005

##### **Awareness Evenings – Magnificent Mitcham**

The Awareness Evening on the 23<sup>rd</sup> February at the Mitcham AFA Bowling Clubrooms resulted in the largest attendance to date of the 13 Evenings in which we have been involved. 170 people attended and we were absolutely thrilled by this response as originally we anticipated approximately half this number. Incidentally nearly 1300 people have now attended these presentations over the past 3 years (detractors of awareness evenings please take note).

Our key speaker Dr Peter Sutherland gave a short overview on prostate cancer and later in the Evening a very interesting presentation on robotic surgery. He was the surgeon who performed the first surgery with a robot in South Australia at the Royal Adelaide Hospital in November last year. Four of our Group also spoke, Dean Wall, Robert Kitto, Bill Toop and Gordon Frith. The speakers were well received by the audience.

The Mitcham AFA Bowling Club was an excellent venue and we received great assistance from members of the Club with approximately 35 of their members attending.

The Evening was supported by a Grant from the City of Mitcham.

I have received some good feedback on the Evening and a check of the evaluation forms completed by the audience included many favourable comments. I have to say the number attending placed a big strain on our resources and in particular I would like to thank Theban, Coralie and Vesna for handling refreshments for 170 people. Our Group certainly needs more members. If anyone is interested in being involved please contact myself on 8277 3424 or other members of our Group. There is great satisfaction in promoting prostate cancer awareness to the community.

##### **Yorke Peninsula**

I am pleased to report there have been some positive developments in relation to this proposed Evening. I have now made contact with a Senior Community Nurse at the Wallaroo Community Health Centre (thanks to Kathriye Strassnick – Cancer Council South Australia). He is happy to provide the assistance we require and has sent details of a possible venue. The suggested date for conducting the Evening is August this year but the availability of a urologist will need to be confirmed. The matter will be discussed further at our March Meeting.

##### **Man Alive 2005**

Pat House has received further details of the Event which is to be held on Sunday 13<sup>th</sup> March, Semaphore Foreshore Reserve, 10am until 4pm.

I quote from an advertisement of the Event:

**Man Alive 2005** is a men's health festival for the whole family to enjoy. Hosted by the well known sports presenter Mark Aiston, the festival's purpose is to promote men's health and well-being and celebrate men's contribution to our community. A wide range of health services will be attending and will be complimented by a variety of stalls from many different cultures and community groups.

Together with the diversity of food and fun activities available, a quality entertainment program will also be included.

The day will create a lively and engaging event for families and individuals of all ages to celebrate men in the community.

##### **Free Admission**

For more information – phone Adelaide Central Community Health Service – Enfield on 8342 8600.

Bring your friends along to enjoy what should be an interesting day.

### **Mount Compass Field Day**

Our Group will also be attending this Event to be held on Wednesday 30th March. Trevor will have further details later in this Newsletter.

### **Rotary Club of Mitcham Fair**

I was unable to obtain a site for this Event. The Club would have made room for us but the proposed position was away from the other sites and we had to provide a tent etc. I contacted several of our Group and the decision was not to take part particularly as Man Alive was on the following day.

I have sent the President of the Rotary Club some brochures as they may need speakers for their future meetings. I also advised we would be happy to be involved in future activities of the Club that are suitable to our Group.

### **Freemasons Art Exhibition to support prostate cancer research**

As detailed in The Autumn edition of "Progress Against Cancer" from The Cancer Council South Australia the Freemasons will hold their inaugural art exhibition in the Great Hall of the Adelaide Masonic Centre between 15 and 17 April.

This major exhibition is expected to attract some 200 artists and offers a first prize of \$2500, second prize \$1200, and third prize \$800.

The exhibition will raise money to fund a PhD research program into prostate cancer in partnership with The Cancer Council South Australia.

Anyone with artistic talent is encouraged to enter. Applications/entry forms are available from the Grand Lodge Officer, 254 North Terrace, Adelaide and the Masonic Foundation, 2/262 Grange Road, Flinders Park.

For more information please phone the Masonic Foundation on 8443 9909.

### **Be A Man Campaign**

I reported last month of the very successful launch of this Campaign in Sydney on the 19<sup>th</sup> January and TV adverts are appearing on SA Channels. As yet we are not aware of when the launch is extending to South Australia but hope this occurs in the near future.

Jeff Roberts

### **MOUNT COMPASS FIELD DAY – MARCH 30<sup>th</sup>**

A site has been booked at this Field Day, but we are awaiting confirmation from the site coordinator.

We have been able to obtain a 3m X 3m tent from the Lions Club of Noarlunga/Morphett Vale, and we have access to a suitable table. It is probably best that we erect the tent on the day prior to the event, to save time on the day. Access and overnight security will be provided by the organisers. We have a supply of the new "Be A Man" pamphlets, and further literature will be obtained for distribution to interested persons. We also have some "Be A Man" T shirts to wear.

All that we require, now, is some manpower to erect the tent, and, more importantly, some manpower to be available on the day of the event.

### **OBESITY MAY MASK PROSTATE CANCER**

Morbidly obese men have lower levels of PSA, potentially masking prostate cancer, according to data. A US study of about 2800 men without prostate cancer found the average PSA value decreased linearly as BMI increased. The average PSA in men with a BMI less than 24.9 was 1.0ng/mL., but dropped to 0.69ng/mL in men with a BMI greater than 40 after adjusting for age and race.

"Of the possible explanations for this observation, it is intuitive that lower circulating levels of androgens and increased levels of estrogens in obese men could affect PSA production," the researchers said (*Cancer 2005; 103, online*).

"The implications of this observation, as well as the recent reports showing the presence of high grade cancer in men with levels of PSA less than or equal to 4.0ng/mL., call into question whether recent reports of inferior outcomes of prostate carcinoma treatment in obese men may be caused by delayed detection." Dr. Stan Wisniewski, clinical associate professor of urology at the University of WA, said it was feasible that an obese man would have a lower PSA and yet be harbouring a cancer of clinical significance

(*Australian Doctor; 4/2 p2*)

## **Report from the CEO (P.C.F.A.)**

### **“Be A Man: Talk to your Doctor about Prostate Cancer” Campaign**

- Obviously since my last update much focus has been on the launch of the “Be a Man” campaign in Sydney. The launch was an outstanding success with a range of celebrated Australians – Andrew G, Jarrod Crouch, Michael O’Loughlin, Wayne Swan, Jim Lloyd, Marcia Hines, Magda Szubanki, Sandy Gore, Darren Beadman, Michael Long, as well as a range of other prominent people. A highlight of the event was a great turn-out from the members of our support groups – some from as far away as Brisbane and Canberra - there to fly the flag, or in this case, wear the T-Shirt about prostate cancer.
- Subsequent meetings with the major sponsor APIA, had demonstrated their delight with how the event was staged – and also their ongoing commitment to building the programme.
- Underpinning the television advertising (which is being screened in NSW, Vic and ACT) was an extensive direct mail campaign that went out to every GP in these areas.
- We intend to make the campaign national in the months ahead. The advertisement has already screened in Queensland, South Australia and Western Australia which was unplanned and unexpected. It also presented me with a problem in that we have not mailed out to all the GPs in these state. So we are currently working urgently to re-print all the materials and mail them to GP across Australia.
- APIA have made a wonderful 15 minute video of the Sydney launch and are having a copy made for each Support Group. I hope they will arrive next week (around 2<sup>nd</sup> March) and then I will but a copy of the video, copies of the Be a Man brochure, some new logo pins and report on the launch in the mail to each Support Group.

### **Movember:**

- Movember was a great event for the PCFA in 2004 and I am currently finalising an agreement to align the event closely with PCFA over the years ahead.

### **Corporate Sponsorship:**

- Over the past few months I have been ploughing away on acquiring some additional corporate sponsorship. It remains a very tough market, however I have had some positive feedback from some major corporations that I hope I can push over the line

### **Prostate News:**

- We have continued to receive quite a few donations in response to the December issue of Prostate News. I was concerned that the awful events in Asia on Boxing Day may have drawn away some of our supporters but this does not seem to have happened to any great extent (although I don’t think we will be so lucky with corporate money).

### **National SAC**

- I have been attending the bi-monthly National SAC tele-conference and it has raised a range of diverse issues that I am working on resolving.

### **New South Wales Issues**

- I have been attending the bi-monthly teleconference of the NSW SAC. The State conference will be held on 20-21<sup>st</sup> May 2005. Day 1 will be a workshop for facilitators and co-facilitators of support groups and will arranged with the NSW Cancer Council using a counselling team from the University of Technology, Sydney
- I have meet with both the NSW Cancer Council and the NSW Cancer Institute about developed an ongoing relationship

### **Queensland Issues**

- I will be joining in the first Queensland Chapter tele-conference next week.
- I am also planing to visit Queensland later in the month to meet up with the Chapter leaders, as well as a visit to our friends at the Queensland Cancer Fund and QUT.

## **Victorian Issues**

- Graeme Johnson (as the Victorian Chairman) and David Sandoe (as Co-Chairman of National SAC) have offered to play a increased role with the support groups in Victoria. As a result meeting with leaders is set for 9 March, hosted by Graeme.
- I have a meeting scheduled for next week with the Victorian cancer Council to work out how we can work together on a range of issues

## **Western Australia**

- I am meeting with Jim Fremantle the National PCFA Director from Western Australia on 3<sup>rd</sup> March to be updates on activities in that state.
- Ms Cheryl Mellor has been retained by the Urological Society of WA to assist with the establishment of the PCFA (WA Division)

## **Prostate Cancer Awareness Month:**

- Attention now turns to September 2005 with our month long campaign to raise awareness about prostate cancer. I am extremely keen to hear from any Support Groups who have ideas for activities during the month.

## **Staffing Issues:**

Following on from a recommendation by the National Board the PCFA is recruiting a junior Marketing and Communications Assistant to be based in Melbourne.

Sadly, Ms Carmel Sayer, who worked part time in the Lane Cove office, resigned from the Foundation in January this year following her relocation to Western Australia.

Best wishes to everyone in our Support Group Network. Andrew Giles

# **Draft Minutes of the Teleconference Meeting of the PCFA – SAC – National Meeting held on Thursday 17<sup>th</sup> February, 2005 at Jacaranda Lodge, Sydney Adventist Hospital commencing at 3.00pm**

**Attended by:** Don Baumber (Qld)-Chair; Andrew Giles (PCFA), Con Casey (NSW/ACT), Pam Sandoe (NSW/ACT).

**Via Conference Call:** Bill McHugh & Keith Williams (Qld/NT/Northern NSW); Bob Wilson (Vic); Trevor Hunt & Gary Bowes (SA); Karen Rendell & Malcolm Sears (WA); Jennifer Lyall (Tas)

**Apologies:** Laurie Henss, (Vic); David Sandoe & Graham Nicholls (NSW/ACT).

**Due to unforeseen circumstances the Agenda of the meeting did not reach everyone by the required time due to a malfunction with "bigpond". In future it will be your responsibility, if you have not received a copy by midday of the meeting date, that YOU contact Administration and request same either by fax or by writing down the Agenda items as dictated over the phone. There usually are no more than 10 items. As the Agenda is *usually* put together by a few over committed people it is now deemed appropriate for all to be more responsible. Unfortunately, Ann Smith was unwell during this week; she has however, been working full time since the "Be a Man" Campaign launch.**

As Chair, Don Baumber opened the meeting in greeting the 'newcomers', Bob Wilson, Karen Rendell and Jennifer Lyall.

(1) Don suggested that to get people involved at a higher level than support groups we firstly have to overcome the problems people have in attending support group meetings. Perhaps, he suggested, that we need to have a certain criteria of recruitment, selection and training by rewarding people to be involved.

(2) Next point raised was to have effective communications in lifting our sights to be truly recognised in the community both professionally and politically.

(3) Due recognition of the place of SAC to PCFA.

Bill McHugh stated that we need to look at the level of projects in hand or those we need involvement with. Con is to update the record of personal involvements as per his previous document which had been tabled to January, 2004. Con suggested objectives to attract people to 'further involvement'.

**1. Confirmation of Minutes of meeting 16<sup>th</sup> December 2004** by Bill McHugh & Con Casey with amendments from:

\* Karen Rendall, Albany group meetings every 6 weeks not two.

\* Bill McHugh – has a point in Business Arising.

\* Don Baumber – Prostate Cancer Awareness 'month' not 'week' for September. Suggestion of linking CaP Month with "Movember" and to align ourselves with Men's Health Week (June 13 – 19) as per University of Western Sydney – [www.menshealth.uws.edu.au/llinks.html](http://www.menshealth.uws.edu.au/llinks.html) .

\* Request to Andrew Giles re Darling Harbour Health Expo – Pharmaceutical companies - Men's Health Section.

**2. Business Arising:**

**i. Rural Health initiatives:** Medical Journal of Australia has coverage in every state with no connection to QCF. Talking with APIA to expand program more rapidly as Rural Health is *Men's Health*.

Gary Bowes advised that over the last three years the **Royal Adelaide Hospital** in conjunction with the **Clipsal V8 500** give men health checks and speak about prostate cancer/psa testing which has proved very successful in regional Australia.

Keith Williams advises HECRA/HCRRC (SA based) – Alice Springs 10 – 13 March – for rural & remote areas (Don thought Victoria based).

**ii. March 9 visit to Melbourne** by Andrew Giles, Ann Smith, David &

Pam Sandoe to give PCFA support to Victorian prostate cancer support groups. Graham Johnson, (PCFA Vic.) has had very limited interaction so invitations have been sent to leaders/co-leaders together with Breast Cancer Network, Can Survive and CC Vic., to encourage meaningful discussions. Bob Wilson offered to check the list of those who were invited to ensure that all the key people, such as Kevin Sunderland, were on the list.

Bob Wilson concentrates on Bayside group but attends Melbourne, Heidelberg, Mornington Peninsular and Waverley when possible. He has no contact with Victorian regional groups. Interest shown by Warrigal chap to start a group by making contact with RSL club for use of facilities and for a publicity night. Bob is interested in continuing his work and uses leaflets available through CCVic., a one-pager "Questions to ask your Doctor" plus APCC "localised CaP".

Keith Williams suggested that there is already suitable material for use at awareness meetings (to be rebadged/revised/reprinted – copy sent by email on Friday 18 so that all knew what was spoken about).

Don Baumber suggested basic material was available by using old Prostate Newsletters (when available) and the need to work more closely with Cancer Council's: Keith reported continuing problems with CCNT.

Bill McHugh also asked that as "consumers" views often conflict with Cancer Councils, (even with the best attempts of Spence Broughton to upgrade what should be put out by QCF), perhaps it is a matter for SAC to achieve the right pitch and for it to be ratified by PCFA as a whole. A position statement on psa required with regard to professional view rather than individual views.

**iii. Speaker's Kit** – John Mayes and Trevor Hunt have made submissions plus those given by delegates at the conference in Brisbane last year, have all taken into account. In hands of designer with draft available soon. It will a very useful tool but must be used to 'tailor delivery to presentation time, requirement of group', perhaps with coaching by John Goodall.

A technical report to be basis of our statement from PCFA.

Fact Sheet on CaP to be redone. Malcolm Sears would like pre and post diagnosis coverage. General discussion on information available for disbursement to consumers. Con Casey advised one of the Cancer Council's were sending out a book published through APCC; he will check with Carole Pinnock. Mr. PHIPP pamphlets still one of the better ones.

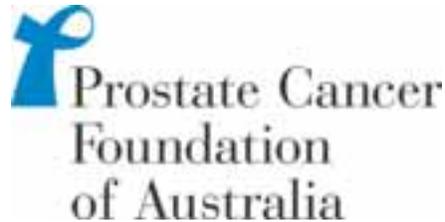
Bill McHugh suggested that a requirement by SAC Qld is that the "PCFA has same view as Urological Society".

Bob Wilson wanted to know why, with psa testing, that the 'free to total' reading was ignored and suggested that it is probably more important than other figures. Don confirmed that it is a useful on 'the list'.

Bill McHugh said insurance still not clear. *Andrew to include copy with Minutes.*

**3. CEO UPDATE:** "Be a Man" launch on 19<sup>th</sup> January received good cover in Sydney and Melbourne with the ad now running on TV. In Martin Place, the launch, hosted by Andrew G, bought together a range of media celebrities, sporting stars, politicians, medical professionals and a large contingent of support group members wearing a "Be a Man" t-shirt which attracted significant public attention and media coverage. PCFA received a phenomenal response. For example in December there were 74,000 website hits compared with 148,000 between 19<sup>th</sup> January and the end of the month. In February there have been 80,000 hits. Phone calls to the 1800 number are now being taken by a telephone bureau, with Administration handling most responses or referring more technical matters to the scientific committee. The expected roll out to other states by APIA will probably be done as soon as information is available for GP's (50 copies of the "Be a Man" brochure to each GP with reorder form). In the meantime, the ad is playing, spasmodically, nationally, but it is understandable that the brochure is required by GP's before continuous advertising commences. Astra Zeneca is prepared to deliver generic brochure at no cost.

APIA advises release of video of launch to all support groups soon which will include brochures ("Be a Man") and new stylised pin



Fact sheet by Deb Cutts (PCFA Melbourne) shows phone calls in/out; website hits. *Andrew to email details.* PCFA Structure: Finance, Governance, Audit – National Board being revised with representation from each State.

Various committees will include positions for others involvement i.e. fundraising.

SAC – Peer Review; Ratification 3 March. General meeting to pass/circulate draft structure very similar to SAC's but calling them "States".

Scientific Reference Committee – APCC cross over with possible wind down of APCC as they merge with PCFA. Andrew acknowledged support from Brian Amos which will continue through the committee. One consequence is that PCFA may hold its own annual scientific conference which may be part of SAC National/States Conference (s), with funding through pharmaceutical companies to one body – PCFA.

Bill McHugh again asked for formal recognition of SAC as it doesn't seem to be written into PCFA constitution. Andrew said that once the Board had met on the 3<sup>rd</sup> March he will circulate further information to the SAC executive.

Con explained SAC recognition as an 'affiliation'. However, new PCFA structure concept outlined as draft proposal to PCFA Board.

The Commonwealth Bank may be willing to support rural/regional Australia with kits, teleconferencing, state based conferences for Vic/SA/WA/Tas.

Perhaps there is a need for a Facilitator to organise events as per CCNSW and give good support to all support groups nationally.

Upgrade of PCFA Website – with newer content; advocacy; awareness; relationships etc. Project officer for website not a priority so it stays with Andrew Giles who answers most of the questions or goes elsewhere for help. The concept of a Project Officer to review the 10 point document originating from Max Gardner, however, could be a possibility. Approval for the use of the PCFA stylised logo must be obtained from Administration. Andrew Giles will ask SAC to review website.

Bill McHugh raised the issue of the APCC's Education Committee that had developed a GP education kit. Bill has stepped onto the committee in the place of Max Gardner. The APCC was looking for PCFA endorsement and Bill agreed to send email to Andrew to outline the process. (Finance for "Train the Trainers" project directed at the Division of GP's on the use of the Cards on PSA advice funded through APCC & QCF ready for printing – promotes PSA – Informed Choice.) At the same time Dr Carole Pinnock will send the kit to Andrew and he will circulate for comment to the SAC Executive and the Professional Education Committee.

#### 4. State Chapter Reports:

**South Australia -Gary Bowes** advised 55 support group meetings last year and expecting to hold more during 2005. Royal Adelaide Hospital link in with their campaigns working with urologists and hospitals in Adelaide, South East and Barossa, pushing to Riverland & Pt. Pirie. Discussion & awareness programs high priority but due to the loss of 18 men/partners through deaths and/or relocation they are finding it more difficult to operate however, regrouping and revitalising and encouraging more to participate especially women. Recently the Dept. of Human Resources issued the first SA women's health policy.

**Trevor Hunt:** Action Group – four functions this year. Awareness program at Mitcham with good registration. Lewis Lodge will be forwarding a cheque for \$75 as result of raffle.

**Western Australia:** Karen Rendell – 52 members including a few wives; with most meeting incorporate a guest speaker; funding required for printing of brochures; radio exposure on ABC/Commercial stations talking about support group; have trialled 'men only'- 'women only' meetings at separate locations; next Tuesday Karen will be in Perth for new group meeting with Cheryl Mellor.

Advised that the WA Division of PCFA 'is happening'. Funds left over from Urological Research Centre used to set up PCFA. Jim Fremantle will be meeting Andrew Giles on 3 March.

Further awareness programs for rural sections at Bunbury and Margaret River.

**Tasmania:** Jennifer Lyall held Launceston's first meeting this month and advised that NW and Southern groups have met also. Incorporates a guest speaker as often as possible.

**Victoria:** Bob Wilson advises that they've incorporated 'networking' of wives/partners similar to WA. As advised earlier new groups formed in Melbourne over last 12 months. In Bayside they have the services of an incontinence nurse and hold medical history sheets on each member for cross referencing in a 'cancer connect' access program. Hoping to set up Library exchange access through all the groups. Bob Wilson asked about "medical dictionary" free advertising being offered to the PCFA. *Andrew Giles will follow up on this request.*

**Queensland/NT/Northern Rivers:** Bill McHugh - well-structured Chapter including NT and Northern Rivers, which are included because of medical service availability. Chapter Council has six members plus three on SAC committee. Minutes sent to all Leaders of PCSG's; Spence Broughton has established liaison with State Health Department. Keith Williams is organising with Darwin Town Clerk for an awareness evening.

**NSW:** Pam Sandoe reported on extensive programs set out in the Newsletters of Northern Beaches, RNS, SAH and Nepean/Blue Mountains.

Graham Nicholls, ACT, approached to help local consumer in Goulburn set up an awareness night with view to support group. Dubbo PCSG travelled to Coonamble for a successful meeting with over 170 locals listening to two consumers and local GP.

Recharge of interest in support group required for Forster with another awareness evening whilst Alan Moran and another man visited the bike group Ulysses to speak to over 100 men/wives/partners and has been asked back in 12 months time.

John Trollor and wife, Pat are involving themselves in Bathurst PCSG.

CCNSW Representative, Kim Pearce, now attends NSW SAC meetings.

Andrew Giles, David & Pam Sandoe recently attended CCNSW to meet with executive members. Very positive meeting, with collaborative action items agreed.

SAC NSW Conference date tentatively booked is Friday 20<sup>th</sup> and Saturday 21<sup>st</sup> May.

Don Baumber advised that next SAC National Teleconference will be 21 April.

Meeting closed at 5.00pm.

*Items 5 – 9 on suggested Agenda not discussed.*

### **DYING MEN TESTING NEW PROSTATE TREATMENT**

Prostate cancer patients with about 18 months to live are testing a new vaccine that might one day prevent its onset. About 600 men in the United States, with advanced prostate cancer, are participating in the trial in which half are receiving the vaccine and half are having chemotherapy. Clinical researcher, Kristen Hege, in Sydney for the Australian Health and Medical Research Congress, said the vaccine was being used to treat the cancer, but could one day be developed to prevent it.

*(Canberra Times, 27/11 p16)*

## Cause for hope in battle against prostate cancer

### Jill Margo

New frontiers have suddenly opened up in the treatment of advanced prostate cancer. Since the arrival of a new form of chemotherapy last June, several more developments have followed, raising the possibility of extending the lives of men with this cancer.

These developments are doubly exciting. Not only are they promising for patients, but they have generated renewed enthusiasm in the prostate cancer research community.

Until recently, the path for men with advanced prostate cancer has been depressingly narrow.

First, such men are offered hormone therapy to suppress the cancer. This works for two to four years but eventually the cancer breaks through the hormone barrier and the therapy becomes useless,

When this happens, the only remaining option used to be standard chemotherapy. But this was a mixed blessing because, while it controlled pain, it would inflict its own side effects and do nothing to extend their lives. Most of these men would die within a year.

The new treatments look far more promising. They appear to increase survival rates and cause fewer side effects.

Manish Patel, a consultant cancer urologist at Westmead and Sydney Adventist Hospital, describes them as “really impressive”.

He was at the American Society of Clinical Oncology meeting in the US last June when docetaxel, the new chemotherapy agent for prostate cancer, made its debut.

Although this drug had been used in breast cancer, it was the first time it had been used for the prostate.

It was also the first drug to improve survival in men with hormone-resistant prostate cancer and was hailed as the new standard of care.

News of it spread around the world and, since then, the drug has been approved in Australia and is used here.

Made from yew tree needles, it is less toxic than standard chemotherapy and decreases the chances of dying by 24 per cent.

Patel says it re-opened the research books:” We were all surprised because we never thought we were going to find a single agent chemotherapy agent that would improve survival.

“It adds a median three months to survival. While this doesn’t sound like much to healthy people, to patients it is highly significant.”

In this case, median survival means some men don’t benefit at all and some benefit for more than 24 months.

Patel says researchers quickly postulated that if docetaxel was good by itself, it would probably be even better if boosted by other drugs.

Two weeks ago, he was back in the US at a multidisciplinary prostate cancer symposium that was full of surprises. One was a study showing that a combination of docetaxel and thalidomide almost doubled survival.

Thalidomide was used because it stops the formation of new blood vessels to tumours.

With docetaxel alone, the median survival was 14.7 months. When

**“New treatments appear to increase survival rates and cause fewer side effects,”**

thalidomide was added, survival rose to 25.9 months.

These were encouraging results, and a trial using the combination is currently being run here by medical oncologist Gavin Marx. through Sydney’s Royal North Shore Hospital, the Sydney Haematology and Oncology Clinic and other sites.

But the biggest surprise at the US symposium was the presentation of a prostate vaccine that worked. Not only did it appear to extend survival but it had very light side-effects.

Called Provenge, it was shown to provide a survival advantage of 4½ months.

Unlike traditional vaccines that prevent disease, this one treats disease.

It is customised for each patient and actually trains their immune system to fight the tumour. The process involves doctors removing certain cells from the patient, mixing them with the vaccine, and then giving the concoction back to the patient in three infusions over a month.

The only side effects are a couple of days of fevers and chills, which feel like a common cold.

In the study presented to the symposium, after three years 28 of the 82 men who got the vaccine were still alive. Of the 45 men who got the dummy vaccine, only five were still alive.

“This made a huge impact,” says Patel. “All this time we thought the only way we were going to get a survival advantage was by finding the right chemotherapy and giving more of it.

‘Because so much effort had gone into different kinds of vaccine with practically no response, they had been sidelined. Now there’s a resurgence interest.

“This means that all men with advanced prostate cancer may be eligible for this vaccine. With chemotherapy, men have to be quite healthy, fit and young.”

Patel says two things will flow from this discovery. The vaccine will be refined and improved upon, and studies will be conducted to find its place in treatment.

These studies will determine if it is better to use a docetaxel combination first and then the vaccine, or do it the other way around. Either way, these new treatments could potentially extend survival.

Patel believes it will be at least a year before this vaccine is available in Australia.

This vaccine is also being tested for less serious cases of prostate cancer, to see if it can be effective in the earlier stages of the disease.

From another frontier, the symposium heard about a targeted form of chemotherapy for advanced prostate cancer. Rather than delivering chemotherapy to the whole body and inadvertently causing damage along the way, researchers described how they send it directly into the prostate.

The researchers, from the Memorial Sloan Kettering Cancer Center, bound chemotherapy molecules onto particular prostate antibodies and then injected them into the body.

These engineered antibodies then entered the prostate, where they were quickly ingested by cancer cells- Once inside the cell, the chemotherapy molecule did its work. This meant there was minimal toxicity to the rest of the body. Although still experimental, Patel says this is very promising, adding that the recent developments have been so positive they have suddenly re-energised research into advanced prostate cancer.

AFR article 3 March, 2005

## **PROSTATE SA**

It would appear that South Australia is in a very good position to take a leadership role in both the care and research into prostate disorders in Australia.

Clinically, brachytherapy is now established in both the private and public sector. A state of the art Da Vinci robot has been commissioned at the Royal Adelaide Hospital and for the first time we have seen evidence that chemotherapeutic agents can now have a beneficial effect on metastatic prostate cancer.

The team at the Repatriation General Hospital and also at the Hanson Institute have been collecting and storing prostate tissues with clinical follow up over many years and with support from the Australian Prostate Cancer Collaboration a major node will be established in Adelaide to further expand the collection and cataloguing of prostate cancer. There is also considerable activity in South Australia in basic research, epidemiology and education – most of this work has a profile at a national and international level. Often, however, even though we are all in the one geographic area, we are not necessarily aware of what other people are doing and also we lack funding and staff to facilitate and coordinate interactions between scientists, clinicians and the community. It has therefore been proposed that because prostate disorders are such a significant issue as far as men’s health is concerned, that we need to establish an organization that will involve all who are involved in research, treatment or suffer from prostatic diseases and for us all to work together to try to obtain further resources from Government, industry and the community to try to further advance our knowledge and treatment, particularly of prostate cancer. The other advantage would be that if we can get a cohesive organization established, it will be

able to network with similar organizations interstate to help formulate and develop national and international initiatives to improve the management of prostate cancer.

The interest in establishing such an organization was tested when some 60 clinicians, scientists and members of support groups from across Adelaide came together and they indicated their strong enthusiasm for the establishment of Prostate SA.

Already we have received support from the Urological Society, from industry and we are now endeavoring to establish a Board of Directors who hopefully will have strong links with industry and/or Government.

The aim of Prostate SA is to have as many individuals involved as possible and if you are interested in more information about Prostate SA or wish to be on our mailing list, please contact Amber Doyle, Dame Roma Mitchell Cancer Research Laboratories, PO Box 14, Rundle Mall, Adelaide, South Australia 5000 . Phone 8222 3225, Fax 8222 3217 and email: [amber.doyle@imvs.sa.gov.au](mailto:amber.doyle@imvs.sa.gov.au)

### **PROSTATE CANCER THERAPY LINKED TO SIGNIFICANT FRACTURE RISK**

Bone mineral density should be closely monitored in men receiving androgen-deprivation therapy for prostate cancer, experts say, after a study showed the treatment is associated with significant fracture risk. The study of more than 50,000 men with prostate cancer also recorded a dramatic increase in the use of androgen-deprivation therapy, raising concerns the treatment was over-used, according to a paper in the *New England Journal of Medicine* (13/1). US researchers found men receiving nine or more doses of androgen-deprivation therapy had a 66% increase in the risk of a fracture requiring hospitalisation compared with men not receiving the therapy. (*Australian Doctor*, 21/1, p4)

### **Topical Paste Reduces Pain Associated with Prostate Biopsy**

According to a recent article published in the *Journal of Urology*, a topical paste that can be applied 30 minutes prior to biopsy reduces pain associated with prostate biopsies.

The prostate is a walnut-sized gland that is located between the bladder and rectum. It is responsible for forming a component of semen. Approximately 230,000 new cases of prostate cancer are diagnosed annually in the United States alone. However, non-cancerous (benign) conditions are also a common medical issue in men, particularly older men. In order to determine whether a patient had prostate cancer or a benign condition, a prostate biopsy must be conducted.

A prostate biopsy consists of the removal of tissue samples in the prostate. During a biopsy, a needle is used to remove several small pieces of prostate tissue through the rectum. These tissue samples are then examined under the microscope to determine whether cancer cells are present.

Unfortunately, the process of a prostate biopsy is associated with mild to severe pain and researchers have been evaluating ways in which to reduce this pain, particularly as men often have to undergo several, periodic prostate biopsies.

Researchers recently conducted a clinical trial to evaluate a topical pain reliever, 0.2% glyceryl trinitrate (GTN) paste and its effects on pain associated with prostate biopsies. This trial included 134 patients who were to undergo their first biopsy. Patients either received topical GTN 30 minutes prior to the biopsy, or placebo (inactive substitute). Participants were then asked to fill out a pain questionnaire, based on a 10-point pain scale following the procedure. Patients who had received GTN had a significant reduction in pain (3.7 on the scale), compared to those who had received placebo (almost 5 on the scale). Side effects of GTN included 10% of patients reporting a headache.

The researchers concluded that topical GTN appear to reduce pain associated with prostate biopsies. They suggest that patients should be offered the option of GTN prior to undergoing the procedure. Patients who are to undergo a prostate biopsy may wish to speak with their physician regarding their individual risks and benefits of treatment with GTN or other pain relievers prior to the procedure.

Reference: Rochester M, Le Monnier K, Brewster S. A double-blind, randomized, controlled trial of topical glyceryl trinitrate for transrectal ultrasound guided prostate biopsy. *Journal of Urology*. 2005; 173:418-420. (Cancer Consultants)

## **WEALTH AND GEOGRAPHY INFLUENCE PROSTATE TREATMENT**

Poorer men and men living in country areas are missing out on optimal treatment for prostate cancer, and dying earlier, says the lead author of an Australian study.

Published in the *British Journal of Urology International*, the study looked at the effects of socioeconomic factors, geography and private health insurance on patterns of prostate cancer in W.A. Across W.A. in the 20 years to 2001, the proportion of men with prostate cancer undergoing radical prostatectomy increased sixfold from 3-20%, while non-radical surgery, including trans-urethral resection of the prostate and open or closed prostatectomy, halved to 29%. However, rural patients and socioeconomically disadvantaged patients were much less likely to have a radical prostatectomy. (*Australian Doctor*, 4/2, p3)

## **PROGNOSIS NOT GOOD FOR SPINAL METASTASES**

Cancer patients with painful spinal metastases have a poor prognosis and palliative surgical procedures are rarely justified, a Dutch study has found (*Cancer* 2005;103;320-28). Radiotherapy was preferable, being well-tolerated and providing relief in three-quarters of cases. Median survival of all patients was only seven months. (*Australian Doctor* 21/1 p15)

## **Glass of Red Wine a Day May Keep Prostate Cancer Away**

SEATTLE — Sep. 22, 2004 — Drinking a glass of red wine a day may cut a man's risk of prostate cancer in half, and the protective effect appears to be strongest against the most aggressive forms of the disease, according to a new study led by investigators at Fred Hutchinson Cancer Research Center.

The findings, by Janet L. Stanford, Ph.D., and colleagues in Fred Hutchinson's Public Health Sciences Division, appear online in *The International Journal of Cancer*.

"We found that men who consumed four or more glasses of red wine per week reduced their risk of prostate cancer by 50 percent," Stanford said. "Among men who consumed four or more 4-ounce glasses of red wine per week, we saw about a 60 percent lower incidence of the more aggressive types of prostate cancer," said Stanford, senior author of the study. "The more clinically aggressive prostate cancer is where the strongest reduction in risk was observed."

Stanford and colleagues found no significant effects — positive nor negative — associated with the consumption of beer or hard liquor and no consistent risk reduction with white wine, which suggests that there must be a beneficial compound in red wine that other types of alcohol lack. That compound, Stanford and colleagues believe, may be an antioxidant called resveratrol, which is abundant in the skins of red grapes but much less so in the skins of white grapes. The compound is also found in peanuts and raspberries and is available as a dietary supplement, which has been suggested to protect against cardiovascular disease.

Laboratory studies indicate that resveratrol influences a variety of biological pathways that are important in cancer development. For example:

- As an antioxidant, it helps sweep dangerous, cancer-causing free radicals from the body.
- As a potent anti-inflammatory agent, it blocks certain enzymes that promote tumor development.
- The compound also reduces cell proliferation, curtailing the number of cell divisions that could lead to cancer or the continued growth of cancer cells.
- It also enhances apoptosis, or programmed cell death, which helps rid the body of cancerous cells.
- It may act as an estrogen, reducing levels of circulating male hormones such as testosterone that fuel the growth of prostate cancer.

While the researchers found that the risk of prostate cancer decreased 6 percent for every glass of red wine consumed per week, Stanford is quick to point out that research shows the law of diminishing returns comes into play when consumption increases beyond moderation.

"From a public-health standpoint, it's difficult to recommend any alcohol consumption given the risks associated with heavy consumption, from increased overall cancer risk to accidental injury and social problems. But for men who already are consuming alcohol, I think the results of this study suggest that modest consumption of red wine — four to eight 4-ounce drinks per week — is the level at which you might receive benefit. Clearly other studies show that more than that may have adverse effects on health."

For the study, the researchers interviewed 753 newly diagnosed Seattle-area prostate-cancer patients as well as 703 healthy controls who served as a comparison group. Detailed information about tumor aggressiveness (such

as tumor grade and disease stage) was obtained through the National Cancer Institute's Seattle-Puget Sound Surveillance, Epidemiology and End Results cancer registry.

"Even though this study is based on relatively small numbers, the results are very intriguing and suggest that the potential beneficial effect of red wine and resveratrol — if indeed resveratrol is the active chemopreventive agent involved — would be very important, because it's the more aggressive forms of prostate cancer than are most important to prevent," she said.

A particular strength of the study, Stanford said, is that the participants were relatively young, ranging in age from 40 to 64, and the majority were under 60.

"By focusing on men under age 65, whose incidence of prostate cancer is much lower than that of older men, we can tease out the effect of a particular environmental exposure on cancer risk, such as wine consumption, more easily than if we were looking at men across the entire age range," she said. This is particularly true when studying complex diseases such as prostate cancer in which numerous genetic and environmental factors are thought to play a role over an individual's lifetime.

Another strength of the study is that in addition to being surveyed about lifetime alcohol consumption, participants were asked about a variety of other risk factors for prostate cancer, such as diet, family history of cancer, screening for prostate cancer and tobacco use, all of which were taken into account and adjusted for when analyzing the data.

While the majority of studies to date have assessed the effects of overall alcohol use on prostate-cancer risk, fewer studies have attempted to compare the effects of wine versus beer versus hard liquor, and only one previous study has compared the impact of red versus white wine on prostate-cancer risk, said Stanford, also a professor of epidemiology at the University of Washington School of Public Health and Community Medicine. The previous study, the Netherlands Cohort Study, evaluated prostate-cancer risk in relation to white and red wine consumption. Increased risks were found in men who consumed "white and fortified wines," but not red wine, as compared to nondrinkers, although there was not a consistent trend in risks with levels of intake. Interestingly, among men who consumed 15 or more grams of red wine per day (about one and a half glasses per day), there was an overall 18 percent reduction in risk and a 16 percent lower risk of advanced-stage prostate cancers. The Netherlands Cohort Study was initiated in 1986 and collected information by self-administered mailed questionnaires that asked about alcohol consumption during the prior year only. Thus, the Netherlands Cohort Study results only reflect associations with recent wine consumption, as investigators were unable to examine lifetime intake as was done in the current Fred Hutchinson study.

"One of the reasons we wanted to do this study is because overall, most of the scientific literature — around 17 studies to date — haven't shown a consistent relationship between alcohol consumption and prostate cancer," Stanford said. "Some have shown an increase, some a decrease, and most no association whatsoever. Part of the problem, we believe, is that few of the studies have attempted to sort out the effects of different types of alcohol intake over a man's lifetime."

Stanford and colleagues plan to seek funding to conduct a larger study to see if their results hold up. In collaboration with Norm Greenberg, Ph.D., of Fred Hutchinson's Clinical Research Division, they also plan to test the effects of resveratrol on mouse models of prostate cancer to see if giving mice this chemical compound will reduce the onset of prostate cancer and/or decrease the aggressiveness of the disease.

The first author of the study, W. Marieke Schoonen, M.S., formerly a graduate student in Stanford's group, is now a doctoral student at the London School of Hygiene and Tropical Medicine. The National Cancer Institute, National Institutes of Health and U.S. Department of Health and Human Services funded the research.

## **Blocking testosterone to starve prostate cancer**

**Jill Margo**

With the increasing use of prostate-specific antigen (PSA) testing, more Australian men are facing the distressing dilemma of what to do when they are diagnosed with early prostate cancer.

The diagnosis presents them with three choices: radical surgery, radiation therapy or "watchful waiting", which means remaining vigilant and taking action if things worsen.

In general terms, none of these options is significantly better than the others. Each has advantages and disadvantages, which makes the choice very difficult.

But now oncologists are attempting to make the watchful-waiting option more attractive by adding a little hormone therapy to it.

They believe occasional bursts of hormone therapy can delay the progression of the cancer.

This idea has come from studies of the intermittent use of hormone therapy in men with advanced prostate cancer. The studies have shown, surprisingly, that in one in four such men, the disease does not recur for three years or more.

Intermittent therapy means a man has three months of therapy, with all its side effects, followed by a long period free of treatment, during which the side effects fade away and life returns to normal. When his free period is up, he has another burst.

The length of the free period is determined by his PSA response to the first treatment. The longer his PSA remains low, the longer the free period. If a man is anxious, his PSA can be monitored weekly but oncologists say three- to six-month intervals will suffice.

Prostate cancer is nourished by testosterone and hormone therapy works by blocking testosterone and starving the cancer.

Tim Oliver, professor of medical oncology at St Bartholomew's Hospital and the London School of Medicine and Dentistry, who was in Sydney last weekend, has been experimenting with this therapy over the past 10 years-While hormone therapy is conventionally used in advanced prostate cancer, he says its use in early prostate cancer is new.

Traditionally, it is given continuously, and about 10 years ago, Oliver had his funding withdrawn for the heresy of delivering the therapy in bursts. He would give a burst for a few months, let the man normalise and then give another.

Now funded through the Orchid Cancer Appeal, a charity set up by one of his patients, he has been able to demonstrate with others that for some cases of advanced prostate cancer intermittent hormone therapy may be more beneficial than continuous therapy.

Indeed, Oliver says while he was being reprimanded for using intermittent therapy in the UK, physicians in Paris were quietly using it to keep Francois Mitterand going during the last years of his presidency of France. But that was for metastatic disease and studies have now shown that with locally advanced disease, a three-month burst will deliver at least 49 treatment-

**“Radiation and surgery continue to have significant side effects.”**

free weeks. If the man responds well, the period of treatment can stretch to 72 weeks, and for a quarter of men it will extend to three years.

This treatment is still experimental. In a fortnight, specialists from around the world will attend a meeting in London, sponsored by the Orchid Cancer Appeal, where they will pool their results from intermittent therapy.

Results of more than 2000 men with metastatic and locally advanced disease will be analysed to define parameters for use of this therapy in very early local disease.

Hormone therapy usually causes mood changes, sometimes affects mental function and always has a negative impact on male sexual function. Oliver says men usually lose their libido and are unable to engage in intercourse. When the therapy is stopped, it takes about two months to return to normal.

Recently, he has changed strategy and begun using the anti-androgen drug, Casodex alone. This drug is similar in side-effect profile and action to Tamoxifen, the anti-oestrogen drug used for women with breast cancer. Its side effects are lighter than the alternatives and although it dulls libido in some, most men remain potent. While their mood may be affected, for the majority there is no adverse impact on mental function-Oliver says the temporary side effects compare favourably with the permanent side effects from the other two treatment options for early prostate cancer.

Although there have been substantial improvements in both radiation and surgery, they continue to have significant, lasting side effects.

While surgery can be the best option for some, it inevitably has a negative impact on sexuality by reducing pump pressure, cutting ejaculation and reducing the length of the penis by about two centimetres.

Over the past 20 years, the complications of surgery have been much reduced but even in the most expert surgical hands, the operation still carries a 1 to 2 per cent risk of severe incontinence and a 20 per cent risk of impotence.

Oliver says although about 80 per cent retain potency, many still need an erectile dysfunction drug to have entirely satisfactory intercourse.

At the time of diagnosis with early prostate cancer, it is extremely hard to predict how swiftly the cancer will grow and often more than a decade can pass before it becomes lethal.

One problem with surgery is that prostate glands that might never have become lethal are removed. Figures from the latest trial of radical surgery from Sweden show surgeons have to operate on 16 men for one man to gain a survival benefit at eight years. Although the benefit may be larger at 10 to 15 years, it means a lot of unnecessary, permanent side effects for the majority who do not benefit.

Oliver says while radiotherapy is a less traumatic treatment in the short term, its effects at 10 to 20 years are not fully known. Recent studies from Europe and the United States have suggested that to get the best results from radiation, it has to be combined with six months of maximum hormone blockading.

It was concern about the late effects of radiation that first spurred Oliver to see if intermittent hormone therapy could stand alone as an alternative treatment. He hopes it will become an attractive alternative to surgery for early prostate cancer.

### **Inherited gene may increase risk for prostate cancer by 50%**

A single gene variant may increase a man's risk of prostate cancer by 50%, according to a new study led by researchers at Mount Sinai School of Medicine and published this week in *Cancer Research*.

In 2001, Mount Sinai researchers published a study in *Science* that showed that a gene, known as KLF6, fails to function properly in at least 50 to 60 percent of all prostate cancers. This was the first single gene shown to be responsible for the majority of cases of this disease, which affects approximately 200,000 men each year.

This finding led to the question as to whether or not mutations in this gene that are present from birth might increase an individual's susceptibility to prostate cancer. John Martignetti, MD, PhD, Assistant Professor of Human Genetics at Mount Sinai and colleagues addressed this question by analyzing differences in the KLF6 gene in 3,411 blood samples from men in registries of three major cancer centers (Johns Hopkins University, the Mayo Clinic and Fred Hutchinson Cancer Research Center). Blood samples were divided into three groups based on the individuals from which they were taken and those with prostate cancer who had a family history of prostate cancer, those with prostate cancer and no family history of the disease, and those without prostate cancer.

About 17% of the patients with a family history of the disease and 15% of patients with no such history carried at least one copy of a single KLF6 variant, but only 11% of the controls had a copy. The significant difference in prevalence of the variant among three groups indicates that individuals with this particular gene variant face an approximately 50% increased risk for developing prostate cancer.

In the 2001 study, Dr. Martignetti, Scott Friedman, MD, Fishberg Professor of Medicine and Chief of the Division of Liver Diseases, and Goutham Narla, an MD/PhD student at Mount Sinai discovered that KLF6, functions as a tumor suppressor gene. Its role is to restrict cell growth. When KLF6 fails to function properly cell growth goes unchecked and cancer may result. It has since been discovered that KLF6 defects are implicated in a number of other human cancers, including colorectal, lung and liver.

The variant of the gene investigated in the report published this week produces an altered version of the KLF6 protein. Rather than entering the cell nucleus to suppress cell growth as the KLF6 protein usually does, this altered version remains in the cytoplasm, where it has the opposite effect, thus increasing cell growth and potentially leading to the development of cancer.

Prostate cancer is among the most prevalent cancers worldwide and is the second leading cause of male cancer-related death in the United States. Incidence is expected to double among men over age 65 in the next 25 years, according to the authors. "Our findings highlight a completely novel and previously unexplored pathway for the development of prostate cancer," said Dr. Martignetti. "Ultimately we plan to investigate the potential of this gene as a diagnostic tool, an indicator of a patient's risk for prostate cancer, and as a potential target for new treatment." (from EurekaAlert)

### **A more accurate screening test for prostate cancer?**

#### *New marker in urine may improve on PSA testing, reduce unnecessary biopsies*

Men middle-aged and older routinely get blood tests for prostate-specific antigen, or PSA, to screen for prostate cancer. However, PSA testing has shortcomings: many men with elevated PSAs don't have clinically significant prostate cancer and may undergo unnecessary treatments, which can cause infertility, incontinence, and impotence. Other men do have prostate cancer, but have normal PSAs, allowing the cancer to spread undetected. A preliminary study from Children's Hospital Boston, led by Dr. Bruce Zetter, shows that a simple urine test may improve upon PSA screening. Results appear in the Jan. 21 online edition of the journal *Prostate*. Zetter, a researcher in the Vascular Biology Program at Children's, is interested in the role of cell motility—

cells' ability to move and travel—in helping cancers to metastasize. He became especially interested in thymosin  $\beta$ 15, a protein that stimulates cell migration and promotes metastasis in prostate cancer. Unlike PSA, it is produced almost exclusively by cancer cells, and is detectable in urine.

In this study, Zetter and colleagues compared thymosin  $\beta$ 15 levels in urine samples from 121 men with prostate cancer, 15 men with other genitourinary cancers (kidney or bladder cancer), 81 men with non-malignant prostate disease (such as prostatitis), 73 men with other non-malignant urologic diseases (such as urinary tract infection), and 52 healthy men who served as controls. Thymosin  $\beta$ 15 levels were elevated in men with aggressive or untreated prostate cancer, but normal or near-normal in healthy men and men with other genitourinary diseases. Men receiving androgen deprivation therapy (an indication they had aggressive prostate cancer) were 12 times more likely than the healthy controls to have elevated thymosin  $\beta$ 15.

Notably, nearly half of cancer patients whose PSA levels were considered normal tested positive for thymosin  $\beta$ 15. Conversely, many men with other genitourinary diseases had elevated PSAs, but normal thymosin  $\beta$ 15 values. When PSA and thymosin  $\beta$ 15 were combined, the combination detected prostate cancer more often than PSA testing alone, with far fewer false-positives.

Zetter, who is also Children's Chief Scientific Officer, is now following the long-term outcomes of men with prostate cancer to determine thymosin  $\beta$ 15's usefulness as a prognostic predictor in combination with PSA testing. The Vascular Biology Program at Children's is also actively studying urinary markers for other cancers. In a small pilot study, Dr. Marsha Moses and postdoctoral fellow Dr. Roopali Roy recently found that a compound called ADAM 12, when detected in urine, is an early marker of breast cancer. Another group of markers will soon enter formal clinical trials in adults with prostate, breast, bladder, lung, and colon cancer. (from EurekAlert)

## Quick Test May Reveal Cancer

**By William J. Cromie**

Cancers secrete proteins that break down tough, fibrous tissue between cells and allow tumors to grow and spread. Such proteins have now been found in the urine of cancer patients, raising the possibility that the disease can be detected by a quick, inexpensive test.

"For the first time, we've established a link between the presence of certain enzymes in urine and the likelihood of either localized or metastatic cancer," says Marsha Moses, an assistant professor of surgery at Harvard Medical School. The enzymes are proteins known as MMPs, or matrix metalloproteinases.

Besides serving as a simple means for initial detection of malignant tumors, MMPs could be used to monitor the effectiveness of cancer treatments. It also may be possible to prevent growth and spread of tumors by blocking the activity of MMPs, a possibility being hotly pursued by drug companies.

"A previous study had detected fragments of MMPs in the urine of patients with bladder cancer," notes Michael Freeman, assistant professor of surgery. "But this is the first report to clearly demonstrate that MMPs can serve as independent predictors of a variety of cancers, including breast, prostate, kidney, and other tumors outside the urogenital tract. Our work suggests that an analysis of MMPs might serve as a first look at patients in whom a malignancy is suspected but not yet detected."

### Refining the Test

Moses, Freeman, and their colleagues, working at Harvard-affiliated Children's Hospital in Boston, compared 117 patients who were either healthy, known to have cancer, or had been treated for cancer and thought to be free of the disease.

They found MMPs in 90 percent of those with metastatic (spreading) cancer and in 71 percent of those whose cancers were confined to one organ, such as the breast or prostate. Nine out of nine breast cancers had the revealing markers.

The test, however, is not perfect. Twenty percent of the healthy subjects, most of whom did not have cancer, tested positive for the proteins. Eleven percent of those treated for cancer and considered free of the disease also tested positive.

"Such levels of false readings are not surprising for a first experimental test of the MMP/cancer association," Moses says. "We expect that further refinements and additional testing will significantly reduce false positives and negatives."

The researchers found three large MMPs in their search for cancer markers. Two were known before, and one had not been previously identified. "We treated the presence of any one of these molecules as a positive indication of malignancy," explains Moses. "We need to do more tests to determine if one of the MMPs, or combination of MMPs, provides a more accurate indication of specific cancers."

“We want to examine different concentrations of MMPs and find out how they are related to specific cancers and to the aggressiveness of those cancers,” adds David Zurakowski, a biostatistician on the research team.

“The bottom line,” he continues, “is that the odds of someone having metastatic cancer are 30 times greater when the MMP marker is present than when it is absent. For organ-confined cancers, the probability of cancer reaches 96 percent when two of the three MMPs show up, but only 29 percent when none is detected.”

“MMPs would not be used alone to diagnose cancer,” points out Dmitri Wiederschain, another member of the team. “A positive MMP reading would be verified by other tests. The advantage of the MMP check would be as a first line of detection available with little expense, time commitment, or discomfort to patients.”

It might, for example, be used to determine which women, particularly those under 50, should have a mammogram, a relatively expensive test that exposes a woman to radiation. It might also precede the standard blood test used to find prostate cancer.

If MMP assays prove to be successful, they might be used to screen people with no or inadequate health insurance. Before that happens, however, any MMP urine test must be refined and tested on many more people.

### **Blocking the Action**

One of the most intriguing implications of this research involves using anti-MMP drugs to treat cancers. In order to grow and spread, tumors need a supply of blood. One of the first steps in obtaining that supply involves tunneling through the tough, stringy matrix that surrounds them. MMPs provide the machinery that makes this excavation possible. If their activity can be blocked, that, in turn, may inhibit growth of blood vessels that tumors need to become larger and more aggressive.

“A number of biotech and pharmaceutical companies are currently developing and testing anti-MMP drugs,” Freeman notes.

To get an MMP urine test approved by the Food and Drug Administration, Freeman and his colleagues will need to develop a more sensitive assay and test it on thousands of patients. The team will not speculate on how long that might take, but they see no major obstacles in the way.

MMPs are relatively large molecules, and researchers want to know how they get into the urinary tract without being broken up by other biochemicals in the body.

“We were amazed that they survive intact,” Moses admits. “It’s not difficult to understand how MMPs might come through unscathed from the bladder or the prostate. But how do they travel from, say, a tumor in the breast?”

That’s not a question of academic interest alone. Knowing as much as possible about those shifty MMP molecules can help in the design of smaller molecules that may be made into a drug that blocks their activity. Such a strategy would combine the best of two approaches: a cheap, simple test to detect cancer and a pill that can block the growth and spreading of malignant tumors.

(Copyright 1998 President and Fellows of Harvard College)

## **.. but only available for the urban and the savvy**

The way our health system is set up, not all of us get the best possible treatment.

Not all ‘Australians have the same access to life-prolonging treatment. If you live in a major city and are educated, savvy and can navigate the medical maze, you are more likely to get optimum treatment.

If you don’t have these advantages~ you’ll get a good standard of care but it will be a lottery as to whether you get the absolute best.

Research has shown that each year about 10,000 cancer patients miss out on radiation that could potentially help them.

It has also shown that 25 per cent of patients with advanced colon cancer don’t receive chemotherapy after surgery even though it is recommended.

Sometimes this is a matter of ignorance, sometimes it’s a question of personal choice and sometimes distance makes the best treatment too difficult to obtain.

But there is another factor. The prejudices of the doctor who first manages the patient’s condition can determine the course of treatment.

Getting optimum treatment is the luck of the draw. It’s controversial but the way our health system works means many patients are operated on by general surgeons where a specialist surgeon would produce a better result. This is particularly so in cases such as bowel and ovarian cancer.

The British experience suggests that a gynaecological oncologist will get a better outcome than a general gynaecologist who in turn ~ will get a better outcome than a general surgeon. This better outcome is not in the treatment of a curable cancer but in the treatment of cancer that is not ultimately curable.

Bruce Armstrong, professor and head of the, School of Public Health at Sydney University, says it is well known that people in rural and remote communities have poorer access to treatment. He describes the case of a woman who was operated on by a general surgeon in a peripheral hospital. The surgeon opened her, saw disseminated ovarian cancer and closed her up, believing nothing could be done. She was no wiser until a junior doctor tipped her off and suggested she go to a gynaecological oncologist who would cut out as much of the cancer as possible and then attempt to have the rest mopped up by chemotherapy.

The woman did this and later became a consumer advocate on a national cancer committee.

Armstrong says specialist ~ surgeons are available in public hospitals but in our health system the pathways are not organised well enough to guarantee every patient gets the same level of care and gets it promptly. Even in the big cities.

He says there is nothing to stop people getting optimum care other than knowing it is possible. They have to know that more can be done and ask for it. "In a sense, your greatest safety in the present system is to be knowledgeable about how the system works and what you need," he says.

"If I run into one of these problems, I'm likely to get very good care not just because I'm known around the medical traps but because I know what good care is. I know where I can get it and I can say I want it. But not many people are in that situation."

Alan Coates, professor and CEO of the Cancer Council of Australia, says there are best practice guidelines for treating different cancers and that the aim is for every Australian cancer patient to receive multidisciplinary care. This means being treated by a team of different experts and it would overcome the lottery of the first doctor and the lottery of access.

Today, he says, at any major centre, patients are offered the best treatment available regardless of their background. But some don't take what's on offer.

But then, some don't know. The Cancer Council of NSW says nearly half of all cancer patients requiring palliative care are not being referred for it because of confusion about what it is.

The common misconception is that it's for people at death's door but it's really about improving the lives of people with advanced disease - and people are living with advanced disease for years.

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Newsletter compiled by *Trevor Hunt*