Does PSA Screening Save Lives? -The Jury is Still Out

Dr. Jeff Sisler, Director, Primary Care Oncology

Manitoba doctors have recently received postcards recommending annual PSA and rectal exam (DRE) screening to men over 50 with the belief that this will reduce deaths from prostate cancer. Although the idea has appeal, PSA screening and concepts such as "PSA velocity" have not as yet been shown in randomized trials to reduce mortality at a population level. Two large trials that address this issue will be reporting in the next year or two. A 2006 Cochrane review (1) found insufficient evidence for such screening, and most authorities take a more cautious approach and recommend that we discuss the pros and cons of PSA screening rather than simply ordering the test. The recent about-face on the benefits of hormone replacement is a reminder of the wisdom of waiting for RCT-level evidence.

But isn't it likely that PSA screening will be found to be beneficial? Quite possibly. It's clear that PSA screening can detect asymptomatic cancer, usually while it is localized. The initial round of the American "PLCO" trial (one of the RCTs mentioned above) screened about 34,000 healthy men 55-74 years of age with a PSA and DRE. Overall, 1.6% of the men screened were found to have prostate cancer, 83% of which was confined to the prostate (Stage I or II) and 43% was high grade (Gleason 7-10). (2)

It's also clear that surgical treatment of early stage prostate cancer is effective. A RCT of prostatectomy vs.observation in men under 75 showed improved overall and disease-specific mortality in the surgical group after 8 years of follow-up, although at the price of high rates of incontinence and impotence. (3)

The doubts are about the PSA test itself. There is a very large overlap of PSA levels between men with and without cancer, with no PSA value that rules out cancer. Age-adjusted cutoffs have been proposed (see table), but to achieve a reasonable sensitivity of 80%, a PSA cut-off of 1.1 ng/ml would be needed, at the cost of a very high false positive rate and many biopsies of men without cancer. (4)

The low sensitivity and specificity of the PSA test means we must be patient and await the results of the RCTs prior to recommending screening for all our patients. For an excellent patient handout, check out the B.C. brochure found at www.cancercare.mb.ca > Health Care Professionals> Prevention & Screening.

Proposed Age-specific ranges for PSA

AGE	NORMAL PSA
40 – 49	<2.5
50 – 59	<3.5
60 – 69	<4.5
70 – 79	<6.5

1. Ilic D et al. Screening for prostate cancer. Cochrane Database Syst Rev 2006 ; (3) :CD004720
2. Andriole GL et al. PLCO Screening Trial. JNCI 2005; 97 (6): 433-438.
3. Bill-Axelson A et al. Radical prostatectomy versus watchful waiting in early prostate cancer. N Engl J Med 2005; 352: 1977-84
4. Thompson IM, Ankerst DP. Prostate-specific antigen in the early detection of prostate cancer. CMAJ 2007; 176(13): 1853-58.

CancerCare Manitoba Referral Office
(Monday – Friday 0830 -1630)
Closed stat holidays
www.cancercare.mb.ca

FAX: (204) 786-0621
PHONE: (204) 787-2176

Health Sciences Centre Emergency Referrals: paging: 787-2071

St. Boniface Emergency Referrals: paging: 237-2053

Reminder: Fax – letter of referral; pathology, operative reports, imaging, bloodwork, and any other releveant information as requested according to disease as specified in the CCMB Referral Guide.

Please ensure that patients are aware of the referral.

UPCON
Uniting Primary Care and Oncology

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CancerTalk

Connecting with Manitoba's Health Professionals *Issue 7, Summer 2008*

New Options for Breast Reconstruction

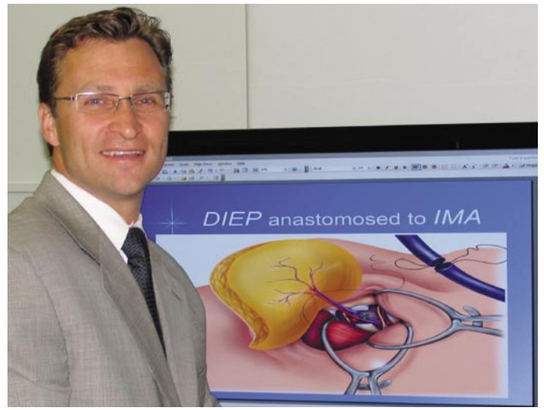
It is estimated that in 2008, 780 Manitoba women will be diagnosed with breast cancer. For 20-30% of those patients, mastectomy is the best surgical treatment and surgeon Edward Buchel wants these women to know breast reconstruction is an option.

"Anyone can be a candidate and a consultation to discuss it should be offered to everyone," said Dr. Buchel, Program Director of Plastic Surgery at the U of M and Head of Surgery at the Health Sciences Centre.

Dr. Buchel, whose team includes Dr. Tom Hayakawa, is one of a handful of surgeons in North America who routinely offers the **Deep Inferior Epigastric Artery Perforator** or DIEP flap technique. The team works closely with CancerCare Manitoba to coordinate care.

The DIEP flap transfers only skin and fat with associated blood vessels from the lower abdomen up to the mastectomy site to reconstruct the lost breast. Unlike the traditional TRAM flap, which also transfers skin and fat from the lower abdomen, the DIEP flap preserves all the muscles of the abdomen. This dramatically reduces complications, recovery time and post-operative pain and leaves no permanent functional weakness.

"You have a nice reconstruction, there is less pain and women can return to normal activities much faster without loss of function,"



Dr. Edward Buchel and his team have performed 600 DIEP flaps in three years.

said Buchel. While there is a 1-2% failure rate, in which case more surgery would be required, nothing permanent is lost. If a TRAM flap didn't work, muscle and permanent strength would be gone."

In most cases, results are best when the DIEP flap is performed simultaneously with mastectomy. This is called an "immediate" breast reconstruction and is coordinated with the breast surgeon. If post-operative chemotherapy or radiation treatments are required, they can be safely done with little impact on the newly reconstructed breast.

In most cases, results are best when the DIEP flap is performed simultaneously with mastectomy. This is called an "immediate" breast reconstruction.

On average, women who undergo a DIEP flap can function normally (return to work or day-to-day activities) within six-eight weeks. With a TRAM flap, the healing period can last between five-six months.

Though the DIEP procedure requires specialized training and can be a longer operation (4 hours for one breast and 6 – 8 hours for both) the extra hours mean women can avoid the common TRAM complications of chronic back pain (10%) and hernia (6-16%).

"It is a better operation and one I'd like to see move to becoming routine," Dr. Buchel said, adding since his arrival three years ago, about 600 DIEP flaps have been performed. Through CCMB and his surgical team, approximately 250 – 300 immediate breast reconstructions are expected to be performed annually.

CancerCare MANITOBA

Announcements

CCPN Annual Conference

The Community Cancer Programs Network (CCPN) and CancerCare Manitoba (CCMB) are pleased to announce the Community Cancer Care 2008 Educational Conference is scheduled for **October 2nd and 3rd in Winnipeg.**

Of special note this year, the Community Cancer Programs in Manitoba are marking 30 years of bringing cancer care closer to home. To celebrate our history, we are pleased to be welcoming Tim Higgins, author of *Bears on Broadway: A Love Affair in Concrete*.

Tim will be presenting "The Widening Road" – a dramatic presentation of the CCPN journey.

To learn more about the conference or to register, please visit: www.cancercare.mb.ca/conference.

Patient Focus Groups

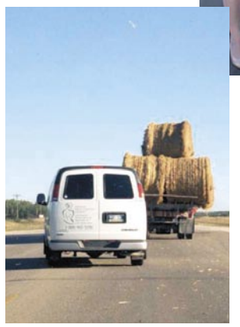
CancerCare Manitoba wants to get more information about the challenges faced by the people accessing services at CCMB. Coming this fall, the Patient Navigation Program will be running monthly Focus Groups. Patients and their family and/or friends are encouraged to join and discuss their experiences. If you have suitable patients who have been under the care of CCMB and would like to participate, please have them contact (204) 787-2065 or e-mail patient_representative@cancercare.mb.ca and arrangements will be made for their participation.

Scholarships for Training

The CancerCare Manitoba Foundation is pleased to offer two scholarships to allow primary care physicians and nurse practitioners interested in the care of patients with cancer or blood disorders to pursue two weeks of training in this area. Each scholar will receive an honorarium and book allowance and will be eligible for Mainpro C credits. One rural and one Winnipeg clinician will be selected.

Go to www.cancercare.mb.ca > Health Care Professials > Education for more information.

Applications close November 3, 2008.



Manitoba's Mobile Breast Screening Program celebrates 10 years on the road!

Life On The Highway

Ten years ago, x-ray technologists rolled into the community of Flin Flon and set up the first mobile breast screening clinic. Now the white van with the CancerCare Manitoba logo is familiar to many women in rural and northern Manitoba because its two mobile screening units criss-cross the entire province every two years, visiting nearly 90 locations throughout Manitoba.

Through the mobiles, the Manitoba Breast Screening Program provides approximately 11,000 mammograms per year for women aged 50 to 69. To date, the number of breast cancers detected on the mobiles alone has reached 508.

To check out the mobile schedule or to book an appointment, call **1-800-903-9290** or visit the CancerCare Manitoba website at www.cancercare.mb.ca/MBSP.

Manitoba Pap Test Week 2008 Aims to Screen 1000 Unscreened Women

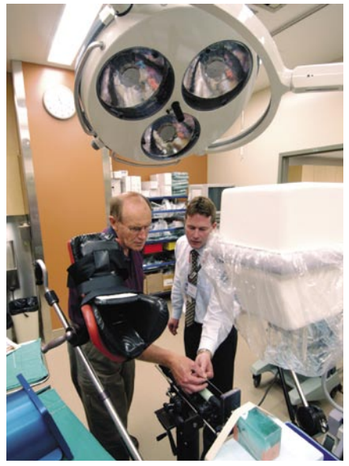
This year's goal for Manitoba Pap Week, October 20 – 24, is to reach 1,000 unscreened women. The Manitoba Cervical Cancer Screening Program will partner again with health centres all over the province to offer walk-in, appointment free Pap tests. Clinic participation has grown from seven clinics in 2003 to 104 clinics in 2007. Last year, 456 (about 32%) of the women who attended the clinics had not had a Pap test in at least five years.

The campaign this year has two new additions. Improvements to program promotional materials and the opportunity for women to get an HPV test.

To confirm your participation in **Manitoba Pap Test Week 2008,** or for more information, contact Kim Templeton at 1-204-788-8648 or toll free at 1-866-616-8805.

Ethelbert crew in 2007.

Brachytherapy: A new treatment option for prostate cancer



Operating suite at CancerCare Manitoba.

Brachytherapy is a minimally invasive treatment for early localized prostate cancer. This form of radiation therapy involves the insertion of multiple 'seeds' directly into the prostate gland. The seeds actually look like small pieces of pencil lead and are inserted through the perineum and into the prostate under general anesthetic. The seeds contain Iodine^{125} as the radiation source. This procedure is performed in the Manitoba Prostate Centre at CancerCare Manitoba.

Long term outcomes are equal to those of the other common treatment modalities, external beam radiation and radical prostatectomy. Complications of brachytherapy affect urinary, bowel and sexual function. In the first 18 months after the implant, some men may experience urinary irritation; this usually resolves quite quickly. Some men may also experience signs of rectal irritation with bleeding in the first three years after the implant. Erectile function remains good in men who had good function prior to the implant; potency is preserved in 79% of men at three years and 59% at six years post procedure.

Many men find this treatment appealing as it has a very short period of recovery and there is no hospital stay. Eligibility is determined by the radiation oncologist and is based on numerous factors including PSA, Gleason score, volume of disease and size of the prostate.

Reduce Your Cancer Risk Series

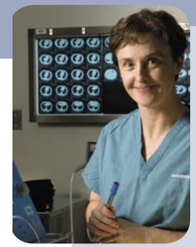
The REDUCE YOUR RISK series is a project of CancerCare Manitoba Foundation and the CancerCare Manitoba Screening Programs.

A DVD is the basis of the series and provides information on the risk factors for cancer, how to lower personal risk, and the screening guidelines (age and frequency). The DVD has four Reduce Your Risk chapters ranging from five to eight minutes, available in English, French, Chinese, Cree, Hindi, Ojibwe, Panjabi, Portuguese, Tagalog, Spanish and Vietnamese.

A facilitator tool kit is available to accompany the DVD - for lay and health care workers.

A Pass It On Copy can be ordered to share with family, friends and neighbours.

The DVD will be available to view and order on the CCMB web site by September or contact any of the screening programs.



Ask the Cancer Expert

Dr. Ethel MacIntosh
Medical Director,
WRHA Breast Health Strategy

Question:

What is "locally advanced" breast cancer, and are women still eligible for the sentinel node biopsy procedure at the time of their mastectomy?

Answer:

"Locally advanced" breast cancer is most simply defined as a cancer that we, as surgeons, do not think we can successfully remove in its entirety. It is a clinical diagnosis that includes inflammatory breast cancer, women with large breast primaries (in part, relative to their breast size) and those with large fungating "neglected" cancers. The risk of involved axillary nodes for such patients is greater than 50%. A more precise definition is a primary breast cancer that is inoperable but has not spread beyond the breast and lymph nodes (axillary and ipsilateral supraclavicular). This is a clinical Stage IIIB cancer and presumes a metastatic workup is negative. It would be treated with pre-operative (called "neo-adjuvant") chemotherapy with a plan to follow this with mastectomy and nodal surgery (usually axillary node dissection or "AND") followed by chest wall irradiation.

Sentinel node biopsy is controversial in the management of such patients. Many expert surgeons would not offer these patients sentinel node surgery. Because of the high likelihood of nodal spread, many will have positive sentinel nodes and on that basis require a full AND. However, I do offer it in this setting as there is no clear evidence supporting a worse outcome in terms of survival, although there may be more local recurrence in the axilla. The challenge is that the technique of sentinel node mapping may fail--the materials used for mapping may not migrate to the axilla in which case an AND would be indicated.