HEALTH CARE • LES SOINS

Canadian MDs begin major push to promote early detection of prostate cancer

David Spurgeon

To the spring of 1991, 500 Canadian men over age 40 were asked in a telephone survey which health issues they discussed most with their doctor during their annual office visit. The answers given the Prostate Cancer Awareness Study, prepared by Schema Research (Montreal) for Schering Canada Inc., were high blood pressure, blood cholesterol levels, heart disease, diabetes and arthritis — in that order. Prostate cancer was the last issue on the list.

Yet, cancer of the prostate is found more frequently among Canadian men than any other type except lung cancer and, next to lung cancer, it causes the most deaths. It is estimated that 11 300 new cases will be found in Canada this year; 3600 Canadians will die from it.

More important, 80% of the men surveyed were unaware of prostate cancer's ranking as a cause of death, 65% didn't know that it is a "silent disease" that often has no early symptoms, and 45% did not realize that it can be cured if discovered early. Most didn't even know where the prostate is located, or what its function is.

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This widespread lack of awareness about prostate cancer is serious because its incidence has been increasing for years at an alarming rate. Between 1970 and 1990, the number of cases among Canadian men rose from 36/100 000 to 56/100 000, a 55% increase. In the province of Quebec alone, the actual number of cases reported rose from 1333 in 1979 to 2029 in 1987 — an increase of 52% in less than a decade.

Globally, the increase is even greater than in Canada: 63% between 1970 and 1990. In the United States it is now the most frequently found form of cancer



Bazinet: public awareness needed

in men, surpassing even lung cancer.

Because the incidence of prostate cancer increases with age, it might be thought that the rise in numbers is caused by more men living longer or, perhaps, better diagnostic methods. Both factors play a role, but not a big enough one to explain why there have been significant increases among all age groups from 45 to 85.

Death rates have been rising in step with the increasing incidence: 2400 Canadian men died from the disease in 1984; the 3600 expected to die this year represent a 50% increase in the death toll.

"In developing public awareness of this disease and in educating men about the need for early detection, we are at least 10 years behind where we are in breast cancer among women," says Dr. Michel Bazinet, assistant professor at McGill University, staff urologist at Montreal's Royal Victoria Hospital, and a member of the national Prostate Cancer Education Council (PCEC). "Most women know how common breast cancer is and understand the importance of breast examinations in treating it. But, as the survey shows, men are not equally knowledgeable about prostate cancer.

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place a significant burden on our society's ability to provide medical care in the years to come. If current trends continue, and there is no reason to believe that they won't, prostate cancer will replace lung cancer as the most common form of cancer among Canadian men by the end of this decade."

The PCEC, formed in June 1990, is a panel of urologists, other physicians and health specialists whose aim is to help educate men about prostate cancer. Chaired by Dr. John Trachtenberg, associate professor of surgery at the University of Toronto, it directs the content of the Prostate Cancer Awareness Program, which is supported by the Key Pharmaceuticals Division of Schering Canada Inc. One activity is the annual national Prostate Cancer Awareness Week — Sept. 16-23 — which involves public figures such as former sports star Maurice (Rocket) Richard. PCEC has also prepared a document for Canadian family physicians and notes that a brochure, Prostate Cancer, Some Good News Men Can Live With, is available from Canadian urologists.

This year another professional group, which has similar aims in the broader field of prostate diseases, was formed. The Canadian Prostate Health Council (CPHC) is modelled on the International Prostate Health Council, which was formed in 1989. Endorsed by the Canadian Urological Association, it is chaired by

Dr. Ernest Ramsey, professor of urology at the University of Manitoba.

Currently, the CPHC and the CMA are working on an educational program aimed at physicians and other health care professionals. Central to the program is a CMA manual that will be published shortly. Benign Prostatic Hyperplasia: A Physician's Guide to Care and Counselling, will provide practical information on differential diagnosis, referrals, treatment options, new drug and surgical therapies, and patient counselling strategies.

Bazinet and many of his colleagues are convinced that the impact of prostate cancer could be reduced, and its sequelae moderated, by early detection if every man over age 40 was given an annual digital rectal examination (DRE). The DRE is easy to perform, involves no extra cost if carried out during a routine medical examination, and involves no pain and little discomfort for the patient.

Unfortunately, family physicians do not seem to be uniformly aware of its usefulness. One-quarter of the patients surveyed by telephone who had had a complete physical examination during the previous 5 years said their physician had not suggested a DRE; a quarter of those to whom the procedure was suggested were unaware of why it was being done. Furthermore, only 62% had the impression that their physicians

felt comfortable discussing prostate cancer with them, and only half of those thought the doctor had given them enough information about the risk.

Authorities do not agree unanimously on the value of a DRE. In its 1979 report the Canadian Task Force on the Periodic Health Examination stated there was little evidence to support the effectiveness of DRE, prostatic massage, cytologic examination and determination of the prostatic acid phosphatase concentration in early detection of prostate cancer. In 1989, the US Preventive Services Task Force found insufficient evidence to recommend for or against routine DRE as an effective screening test for prostate cancer in asymptomatic men. However, the Canadian Cancer Society recommends a regular DRE for all men over 40, and the American Cancer Society and the US National Cancer Institute both recommend an annual DRE.1

The only way to prove the value of DRE, says Bazinet, would be to undertake a randomized clinical trial involving two groups of men — the men in one group would have an annual DRE — and to determine at the end of 10 to 15 years whether there was a difference in prostate cancer mortality. Such a trial is currently being considered by the US National Cancer Institute.

Meanwhile, common sense suggests that detection of prostate cancer while it is still confined to "Ten years ago, 100% of men would be impotent following prostatectomy. Today, thanks to surgical techniques that spare the nerves going to the penis, it's in the range of 50% if they were sexually active before the operation."

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the organ, followed by removal or irradiation of the gland when feasible, would probably improve both morbidity and mortality, Bazinet says. Moreover, a man in his mid-60s who has prostate cancer is more likely to die from that cancer than from any other cause within the next 10 years.

The reason why cancer develops in the prostate is unknown. No specific dietary or environmental factors have clearly been shown as the cause, although some studies point to high-fat diets and caesium in the workplace. Currently, a Canadian man has an 8% probability of developing prostate cancer, and a 3.2% probability of dying from it.

New tests are now available that improve the chances of early detection. These include transrectal ultrasound and a blood test that measures prostatic specific antigen (PSA). PSA is produced only by prostate cells and if prostate cancer is present it will show up in blood serum in higher-thannormal quantities.

"A decade ago all we had was the DRE," Bazinet explains. "Then, depending on the judgement of the physician, a biopsy might be done, and the biopsy might not have been all that accurate. Ultrasound existed but was not precise enough. Transrectal ultrasound, which is now used routinely in Montreal, allows you to see suspicious lesions in three dimensions, permitting more accurate biopsies. PSA is controver-

sial as a screening agent because it produces a lot of false positives, but it has been shown recently to improve the early detection rate, finding lesions the DRE doesn't detect."

As with other forms of cancer, the earlier prostate cancer is discovered, the more effectively it can be treated. About one-fifth to one-quarter of patients will have only localized tumours. These can be treated successfully either by radiation or by new surgical techniques developed in the past decade; many of these patients can live a normal life while remaining sexually active, says Bazinet.

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Even if prostate cancer is discovered in its later stages, much more can be done today than a few years ago. Since prostate tumours' growth depends on the male hormone produced by the testes, in some cases this hormone must be removed from the system. This can be done either by castration or by administration of another hormone (luteinizing hormone-releasing hormone, or

LHRH), which blocks male hormone production. (Bazinet notes that LHRH medication was developed by Dr. Fernand Labrie, director of the MRC Research Group and scientific director of the Research Centre, Centre Hôpital de l'Université Laval, Quebec City.)

One reason some men wait until it's too late to have an examination for prostate cancer is that they might have symptoms they associate simply with growing old and consider harmless, such as difficulty in urination, frequent urination, especially at night, pain or burning when urinating or ejaculating, and blood in the urine or semen.

These may, as they believe, result from benign prostatic hypertrophy (BPH), but such symptoms can also be caused by prostate cancer, as can persistent pain in the back, hips and pelvis. It takes a medical examination to find out why they are there.

Bazinet believes primary care physicians have an important role to play in the educational process. "Because we don't know what causes prostate cancer we can't tell how to avoid it. So our goal is to urge earlier detection to save lives."

Reference

 Canadian Task Force on the Periodic Health Examination: Periodic health examination, 1991 update: 3. Secondary prevention of prostate cancer. Can Med Assoc J 1991; 145: 413-428