

REGIONAL MUNICIPALITY OF OTTAWACARLETON
 MUNICIPALITÉ RÉGIONALE D'OTTAWACARLETON

REPORT
RAPPORT

Our File/N/Réf. RC
 Your File/V/Réf.

DATE 17 March 1998

TO/DEST. Co-ordinator
 , Community Services Committee

FROM/EXP. Medical Officer of Health

SUBJECT/OBJET **RESPONSE TO INQUIRY CSC NO. 02(98): INITIATIVES
 REGARDING PROSTATE CANCER**

DEPARTMENTAL RECOMMENDATION

That the Community Services Committee receive this report for information.

INTRODUCTION

At the Community Services Committee meeting of 22 January, 1998 Chair Alex Munter made the following inquiry:

The breast cancer kits and awareness programs produced by our Health Department have been well received. Does the Health Department have similar programs or public education initiatives regarding prevention, detection or treatment of prostate cancer.

BACKGROUND

(More detailed information on which this report is based is included in Annexes A and B)

Descriptive Epidemiology

Prostate cancer has now overtaken lung cancer as the most commonly diagnosed cancer in Canadian men, of whom 1 in 9 will eventually develop prostate cancer and 1 in 27 will die of the disease. Despite its frequent label as an "indolent disease", prostate cancer is now the second most common cause of death due to cancer in Canada, responsible for 4100 deaths in 1997. Although the incidence rate of prostate cancer in Canada has doubled since 1969, this rise reflects at least in part increased testing and an ageing population rather than a true increase in the disease. A dramatic rise in United States incidence rates occurred between 1988 and 1992 for similar reasons.

Screening

A decrease in deaths from prostate cancer is the ultimate goal of a screening program. Two principles must be met to have a successful screening program. First, there must be a test or procedure that can detect cancers earlier. Second, earlier treatment must result in a better outcome. The best indicator of success in a screening program is a decrease in the number of deaths from prostate cancer.

Three techniques can be used together or independently to detect prostate cancer: Prostate specific antigen, (PSA) a blood screening test; Transrectal ultrasound, (TRUS), an ultrasound test and Digital rectal examination, (DRE) a physical examination

The two most widely used screening tests are the PSA and DRE.

PSA Test

The PSA test detects prostate cancer accurately only 25-33% of the time. This means that there is only a 1 in 3 chance that a patient with an abnormal PSA has prostate cancer, and these results do not meet criteria for establishing population screening programs. Moreover, it is also possible that patients harbouring advanced prostate cancers may not exhibit elevated PSA levels, thus being mis-classified as normal.

Other conditions which increase the PSA value include non-cancerous enlargement of the prostate, infections of the prostate, or urinary tract infections. Because of this, using the PSA test can falsely indicate that a patient has cancer when in fact they do not. Lastly, one additional weakness is that there are many different PSA tests and result ranges being used in Canada, and this could cause inconsistencies in test result interpretations by different health care providers

DRE and TRUS

DRE is a physical examination of the prostate gland done by using a gloved finger to feel the gland through the intact wall of the rectum. Because the examiner cannot feel the entire surface of the gland with this method, about 40-50% of cancers in the gland can go undetected and patients may be incorrectly reassured that they do not have. In addition, the DRE can be abnormal in non-cancerous conditions, and this could result in a patient being told that they have cancer when, in fact, they do not.

The TRUS uses high resolution ultrasound imaging to detect changes in the volume of the prostate which may be indicative of small or emerging cancers. Most studies agree that the TRUS should not be used as a primary diagnostic tool because it is not a very specific test for prostate cancer detection.

Treatment of Prostate Cancer

Treatment depends upon the amount of disease present at the time of detection. Options include removal of the entire prostate gland (prostatectomy), high-precision radiation treatment, hormone therapy, and chemotherapy for hormone-resistant disease.

There is still controversy about the effectiveness of aggressive treatment in this disease (Annex A) and concerns about side effects. Possible treatment complications from radiation or surgery include impotence, acute gastrointestinal problems, urethral and bladder damage, and death. One recent study indicated post-surgical results as follows: death rates were less than 1%, only 28% of patients maintained erectile function adequate for intercourse after surgery, and approximately 80% retained complete control or only occasional urinary incontinence. Recent studies of shared decision-making show that a significant percentage of men will decline participation in prostate cancer screening once informed of its uncertain treatment benefits and potential risks.

Conclusions on Screening for Prostate Cancer

Epidemiological data do not demonstrate that screening is decreasing mortality. The benefits of screening and early detection, although theoretically possible, are as yet unproved, whereas the risks and harm of screening and resultant treatment are definite. Currently, there are several groups, both in Canada and the United States who do not advocate screening. These include The United States Preventative Services Task Force, The American College of Physicians, The Canadian Task Force on the Periodic Health Examination, The National Cancer Institute, The Canadian Cancer Society, and The British Columbia Office of Technology Assessment. Updates to these recommendations may occur in the future as further evidence of additional randomized control trials becomes available.

Prevention

Age greater than 50 years and a strong family history of prostate cancer are the two major risk factors for prostate cancer. A strong family history of prostate cancer increases the risk of prostate cancer in male first-degree relatives approximately two-fold; this means that the brother or son of a person with prostate cancer has twice the risk of himself having the disease throughout his life.

At the present time, no preventable risk factors relating to lifestyle or behaviour have been identified. Further research into these areas may lead to future recommendations with respect to prevention.

PUBLIC CONSULTATION

There was no public consultation done in the production of this report.

FINANCIAL IMPLICATION

There are no financial implications associated with this report.

CONCLUSIONS AND PUBLIC HEALTH IMPLICATIONS

Prostate Cancer is an important cause of mortality and disease in men. At the present time we have no health educational messages for the population which can help prevent the disease. Screening while widely practised has not been shown to significantly affect the course of disease in populations. There are major concerns about the adverse effects of aggressive treatment. This is very different from breast cancer where screening and treatment have been definitely shown to improve survival in women over fifty.

As a result, the Health Department agrees with the Canadian Task Force on the Periodic Health Examination (Annex A) that promotion of preventive messages and screening are not appropriate for this disease at this time. Research is continuing and staff will continue to monitor the situation closely and change our policy in the light of new information.

*Approved by
Robert Cushman, MD, MBA, FRCPC*

Attach. (2)