Bulletin d'information du PQDCS de Montréal-Centre

The Cancer Team, serving Montrealers

In our last newsletter, we talked to you about the merger between the Québec Breast Cancer Screening Program (QBCSP) Coordination Centre and the Cancer Team. We also said that through his merger, the infrastructure of the screening programme was gaining a research and evaluation component. The focus of the Cancer Team's research activities is linked with that of the Programme de lutte contre le cancer and includes projects related to screening, treatment and end-of-life care. Using a population-based epidemiological approach, the studies conducted by the Cancer Team aim firstly to describe the current situation of cancer care and services in the Montréal region, and then to specify the underlying factors related to the issues identified during the first phase, using an aetiological approach. Over the last two years, we have tried to determine Montréal's position in relation to other Canadian cities and provinces. We have looked at cancer incidence and mortality rates in Montréal for the period 1984-1994 inclusively and compared them with the Canadian rates. This study shows that deaths due to breast cancer are 15% higher, when incidence rates are taken into account.

During the next year, the Team's evaluation projects will be principally directed towards the breast cancer screening program. Several projects are already underway.

The first project aims to provide an exhaustive description of the administrative and clinical procedures of the targeted centres. Another objective is to become familiar with existing service corridors among the Designated Screening Centres, Designated Assessment Centres and other centres offering screening and diagnostic services, as well as insurance and quality control activities currently in force in Designated Screening Centres and Designated Assessment Centres.

The objective of the second project is to evaluate women's satisfaction with the services offered by the QBCSP. The way Designated Screening Centres and Designated Assessment Centres greet women, and the information women ask for and are given when they call to make appointments will be documented through three anonymous telephone calls made by staff from the Coordination Centre. Satisfaction levels of women who participate in the QBCSP will be evaluated using a questionnaire mailed to 2000 women. The third component of this project, conducted in collaboration with Relais-femmes and Action Femmes handicapées Montréal, will document access to Designated Screening Centres and Designated Assessment Centres for women with motor, visual, auditory, or intellectual disabilities. An evaluation grid has been developed specifically for this purpose, and Coordination Centre staff and disabled women themselves will carry out the evaluation. In a fourth component of the project, we will document the support needs of women who are awaiting diagnosis following an abnormal mammography result, the resources utilised to meet these needs, and the women's satisfaction related to the accessibility and quality of resources currently available. About 1200 women who have had an abnormal mammography result will be contacted and asked to complete a questionnaire evaluating the aforementioned issues. This latter component is part of a project entitled *Soutien et accompagnement des femmes en attente de diagnostic suite à un résultat anormal à la mammographie de dépistage*. This *Breast cancer regional priority* intersectorial project is commissioned and administered by the Réseau québécois d'action pour la santé des femmes (RQASF). Finally, a survey will be conducted among 6000 women for whom the QBCSP is intended but who have never participated in the Program. This survey will document the underlying reasons for which women do not participate, and be used to develop strategies to encourage women to have a mammogram as part of the QBCSP and persuade their physicians to recommend it.

In addition to these projects, we will continue to conduct epidemiological studies of breast cancer. One of these studies, funded by the Canadian Research Institutes and carried out in collaboration with the British Columbia Cancer Agency, is presently underway; it will determine the relationships among mastalgia, breast engorgement, and breast cancer. This project is part of a series of studies in this area; some of the results were recently published in the *Lancet*, and are summarised in the Scientific section.

Michèle Deschamps, *Administrative coordinator*
Pierre Band, *Head of the Cancer Team*

Breast cancer and women from ethnocultural communities

During Breast Cancer Awareness Month, the Alliance pour l'égalité dans la santé et les services sociaux (ACCESSS) introduced two new tools.

The first is a literature review on barriers to breast cancer screening among women from ethnocultural communities. This very useful document is intended for caregivers in this field. Entitled ***Dépistage du cancer du sein et femmes des communautés ethnoculturelles***, it is available for $15 plus $2 for postage.

Cancer du sein : nous vous témoignons is a booklet of testimonies by women from ethnocultural communities who have breast cancer. The purpose of the booklet is to raise awareness about the fact that women can survive breast cancer. This publication is free.

For more information or to place an order, contact ACCESSS by telephone at 514 287-1106, by fax at 514 287-7443, or by e-mail at accesss@bellnet.ca

News from Québec City

Screening among 40- to 49-year-old women: What's new?

Has the discussion on breast cancer screening mammography among women aged 40 to 49 ended for good following the publication of an article on this topic in the September 2002 edition of *Annals of Internal Medicine?*

The Canadian study should be seriously considered because it is the only randomised study available and was developed specifically for the purpose of responding to this question. Studies that seemed to show significant benefits for 40- to 49-year-old women, in Sweden in particular, included fewer women in their 40s and extended into the 50- to 69-year-old age group, making it more difficult to determine the true contribution of beginning to screen women in their forties. These studies also showed that overall, the impact of screening on mortality was less significant and occurred later than among older women.

At the outset, breast cancer screening is intended for a healthy population. Although the advantages for women are not extensive, the disadvantages (anxiety or unnecessary procedures in case of false positive results, a false sense of security, and potentially longer delays in establishing a diagnosis in case of a false negative result) can have a strong impact on them. Without denying that screening women in their forties can have certain benefits, experts disagree on the risk-benefit assessment. For this reason, women aged 40 to 49 have not yet been targeted by the systematic screening program offered in Canada. The Canadian Task Force on Preventive Health Care has issued a grade C recommendation in relation to this issue.

Another randomised trial is currently underway in the United Kingdom; this study looks at women who were 40 or 41 years of age at the time of recruitment. Since results are not expected before 2005, uncertainty regarding the benefits of screening women in their forties is likely to persist for a time.

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News from our partners

Suggestions from Relais-femmes...

Two health workers, who sit on Relais-Femmes' Table communautaire cancer du sein and who have been involved in the *Breast cancer regional priority* since 1995, have taken on the challenge of developing different strategies to raise awareness about breast cancer screening among women who are difficult to reach. Here are some of the activities they suggest be undertaken over the next few months. We invite all QBCSP partners to promote these activities among their clientele.

La Sein phonie des mots

To inform more women about breast cancer screening and the social image of breasts, Relais-Femmes is holding a writing contest entitled *La Sein phonie des mots.* The goal of this contest is to say out loud what is usually whispered about breasts, to tell true-life stories, and to acknowledge women's creativity publicly. Winning life stories and works of fiction will be read by storytellers and actors during the *Sein phonie des mots et manifestation de soutien* event that will be held in a Maison de la Culture in March 2003. Winning stories will be published by Planète Rebelle and their authors will receive prizes. All texts must be sent before 1 February 2003.

Play… Ask… Win!…

This year marks the third edition of this contest, whose goal is to raise women's awareness about breast cancer screening. The prize is a Montréal-Québec City round-trip train ticket and two nights, including breakfast, at the *Auberge l'Autre Jardin*. Answers must be sent in by 10 December 2002, at 5:00 p.m. The draw will take place on 11 December 2002.

Breasts: from representation to screening

For crossword puzzle fans, here is another tool that tests or improves knowledge related to breast cancer screening. Send in your answers before 28 February 2003 at 5:00 p.m. and you could win a bathrobe created and made to measure by young Québec designers from *Vinet Marie*.

For more information on the activities of Relais-Femmes or to send in answers to the various contests, contact:

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Scientific section

Smoking and breast cancer: Is there a link?

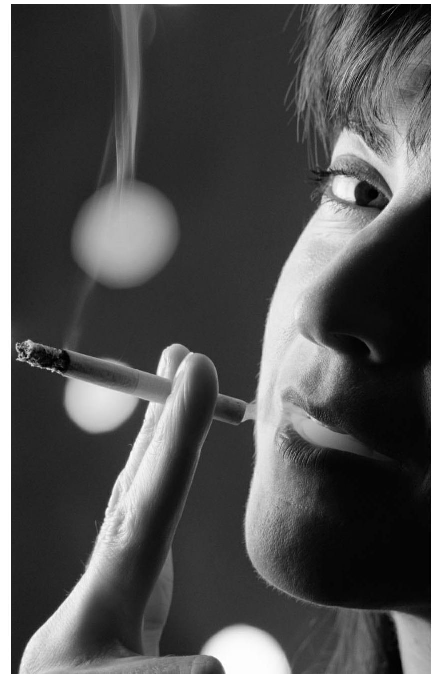
Pierre Band et al.[1] have just published a study evaluating the carcinogenic and possibly anti-oestrogenic effects of cigarette smoke related to the risk of breast cancer.

To date, epidemiological studies had not produced conclusive results on this association. The authors based their study on the hypothesis that the anti-oestrogenic effects of smoking may reduce the risk of breast cancer. They also posited that the risk of breast cancer may increase because the breasts of women who smoke are exposed to carcinogenic substances in cigarette smoke.

Results of animal studies demonstrate that the susceptibility of the breast to chemical carcinogens is dependent on stage differentiation of the mammary gland, which is greatest around the time ovarian function begins—when the breast consists mainly of undifferentiated terminal ductal and lobular structures. Full breast differentiation occurs after fullterm pregnancy, and greatly reduces susceptibility to induction of tumours. In humans, development of the mammary gland is comparable and in vitro studies have shown a similar susceptibility to tumoral transformation by carcinogenic agents, depending on the breast cells' degree of differentiation. These studies suggest an increased sensitivity of the female breast to the effects of environmental carcinogens between menarche and first fullterm pregnancy.

How can we differentiate between the competing carcinogenic and anti-oestrogenic effects produced by cigarette smoke? The maximum carcinogenic effect is observed in a group of premenopausal women with breast cancer who started to smoke around menarche and before their first fullterm pregnancy. The anti-oestrogenic effect is observed in a second group composed of women who developed beast cancer after menopause and who started smoking after a first fullterm pregnancy.

This case-control study looked at two groups of women: the first was composed of women under 75 years of age who had breast cancer diagnosed between 1 June 1988 and 30 June 1989 and who were listed on the British Columbia cancer registry; the control group included women of the same age who had no history of breast cancer and were registered on the 1989 British Columbia provincial voters list. A total of 1489 questionnaires were sent to the women with breast cancer, and 1018 responded (response rate of 68%); 1502 questionnaires were sent to the women in the control group, and 1025 responded (68% rate of response). Among premenopausal respondents, starting to smoke within 5 years of menarche was associated with a significantly higher risk of breast cancer. Among postmenopausal women regardless of history of pregnancy, none of the variables linked with smoking were associated with a significantly higher risk of breast cancer. In addition, after variables were adjusted, a reduced risk was noted among women who started to smoke after a first fullterm pregnancy.



These results show that among premenopausal women, the risk of breast cancer increased in those who smoked before a first pregnancy but only if they had started to smoke within 5 years of the onset of menarche, and also in nulliparous women. Results suggest that human breast tissue is most sensitive to environmental carcinogens during periods of rapid cell

[1] Band,P.R., Le,N.D., Fang,R., Deschamps,M., Carcinogenic and endocrine disrupting effects of cigarette smoking and risk of breast cancer, The Lancet 2002;360:1044-9.

proliferation when differentiation is incomplete (puberty) and when differentiation is not finalized (nulliparity). Among nulliparous women, risk of breast cancer was strongly related to smoking intensity and duration. The raised risk of breast cancer associated with smoking is probably related to exposure to potent carcinogens contained in tobacco smoke, especially polycyclic aromatic hydrocarbons (PAH).

Among postmenopausal women, smoking was not associated with an increased risk of breast cancer, irrespective of pregnancy status or age at which smoking was initiated. A significantly reduced risk of breast cancer was noted among women who started to smoke after a first fullterm pregnancy and whose BMI increased since age 18, but not among those whose BMI had not changed. These results suggest that carcinogenic events that lead to breast cancer in postmenopausal women are not related to exposure to tobacco carcinogens shortly after menarche, and that under specific circumstances of exposure to cigarette smoke, the risk might even be reduced through a mechanism that decreased the production of endogenous oestrogens in postmenopausal women.

The study strengthens the importance of smoking prevention in early adolescence. It also opens the way for subsequent studies on the effects of carcinogens and agents that may have a hormonal impact on the risk of breast cancer in pre- and postmenopausal women.

Original article : www.thelancet.com

In print or on the Web

First results from the International Breast Cancer Intervention Study (IBIS-1) : a randomised prevention trial, J. Cuzick et al., The Lancet, vol. 360, Sept. 14, 2002

This British randomised double-blind trial, which included a group receiving treatment and a placebo group, studied the use of tamoxifen, 20 mg/day for 5 years in 7152 women aged 35-70 years who were at increased risk of breast cancer. The study confirmed that tamoxifen can reduce the risk of breast cancer among healthy women by about a third. However, thromboembolic disease is the most important complication of tamoxifen use, and the risk seems to be similar to that for women taking hormone-replacement therapy. Specific precautions should be adopted, especially in relation to surgery: tamoxifen use should be discontinued before any surgery, appropriate antithrombotic measures taken during surgery, and tamoxifen should not be restarted until full mobility has returned. Tamoxifen is contraindicated in women at risk of thromboembolic disease. Although tamoxifen clearly reduces the risk of recurrence and death, when used as adjuvant therapy for breast cancer, the overall risk to benefit ratio is still unclear. Further long-term follow-up of incidence and mortality due to breast cancer, other causes of death, and side effects in current trials remains essential. The full article is available at www.thelancet.com

The Canadian National Breast Screening Study – 1 : Breast Cancer Mortality after 11 to 16 years of Follow-up, A.B. Miller et al, Annals of Internal Medicine, vol. 137, no 5, Sept. 3, 2002

The efficacy of breast cancer screening in women age 40 to 49 years remains controversial. The goal of this randomised study was to compare breast cancer mortality in 40- to 49-year-old women. One group of women received annual screening mammography, breast physical examination, and instruction on breast self-examination on 4 or 5 occasions. The other group received community care after a single breast physical examination and instruction on breast self-examination. The article presents the results obtained an average of 13 years after onset. Results show that among women aged 40 to 49 years, annual mammography and breast physical examination for 5 years did not reduce breast cancer mortality compared with women who had a single breast physical examination and subsequent community care. This study suggests screening mammography among 40- to 49-year-old women is unlikely to reduce breast cancer mortality. The complete text of the article can be found at www.annals.org

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