Sociodemographic Characteristics, Smoking, Medical and Family History, and Breast Cancer

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ABSTRACT: The relationship between sociodemographic characteristics, lifestyle, family history of cancer, medical history, and reproductive factors and breast cancer was investigated in a population-based case-control study of French Canadians in Montreal. In this study, a total of 414 French-Canadian cases and 429 age- and language-matched population controls were interviewed. Ever-married women showed significantly lower risk (OR: 0.64 [0.45–0.92]) for breast cancer, as did smokers (OR: 0.73 [0.55–0.98]), particularly of nonfilter cigarettes (OR: 0.36 [0.17–0.72]). Weight history, both for the year before the diagnosis of breast cancer and 10 years previously, was associated with risk for the disease. A strong inverse relationship was found between the number of full-term pregnancies (OR: 0.48 [0.28–0.82]) and the risk of breast cancer, while the p trend for late age at first pregnancy (p = 0.02) and menopause (p = 0.004) was statistically significant. A history of breast problems (OR: 1.87 [1.34–2.60]) and a history of breast cancer in relatives (OR: 2.95 [1.63–5.34]) were strongly associated with risk. This study confirms the risk factors of late age at first full-term pregnancy, nulliparity, late age at menopause, and positive family history of breast cancer in the etiology of this disease. Perhaps the protective effect of smoking against breast cancer could be due to its antiestrogenic influence.

KEY WORDS: breast cancer, family history, French Canadians, lifestyle, smoking, sociodemographics.

INTRODUCTION

Breast cancer is a major health problem in many of the more developed countries of the world. Globally, breast cancer is the most frequent malignancy among women, with more than 700,000 new cases diagnosed worldwide each year in the mid-1980s. Breast cancer is the most common cancer among women in Canada, with an age-standardized incidence of 108 per 100,000 women, or 31.0% of all female cancers. In Quebec, this rate is 94.0 per 100,000 women, representing 28% of all female cancers.

The change in risk of breast cancer in migrants from low-incidence to high-incidence areas, and in their descendants, argues strongly for environmental influences. For example, the incidence in Hawaii and San Francisco Bay Area Japanese is now double that in Japan, although the difference is less in Los Angeles (1.4-fold).

The incidence of breast cancer is increasing slowly in most countries. Mortality rates have also been rising in, for example, Japan and Hong Kong, whereas they tend to remain stationary in Western countries. In the United States, mortality in white women less than 50 years of age has fallen, overall mortality being remarkably stable between 1950 and 1982.

There are many risk factors for breast cancer that have long since been identified. The frequency of the disease is higher among women of higher socioeconomic status, in women who are nulliparous or have a long menstrual history (early menarche and late menopause), and in women who have their first preg-