US study shows wide variation in approach to ductal carcinoma in situ

Janice Hopkins Tanne *New York*

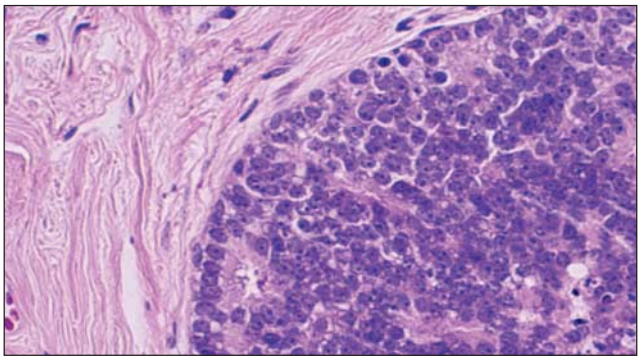
Some women in the United States with ductal carcinoma in situ (DCIS) are under-treated, not receiving recommended radiation even when they have risk factors indicating its use, and others are over-treated with mastectomy and axillary dissection. Treatment depends on where women live, reported a study published last week.

The study used data from the US National Cancer Institute's surveillance, epidemiology, and end results database (SEER) to review the treatment of 25 206 patients with DCIS, a pre-cancerous growth, from 1992 to 1999 at 11 different sites. Results showed that where a woman lived was a significant predictor of the use of breast conserving therapy, radiotherapy after surgery, and axillary dissection ($P<0.001$). Only 55% of women had lumpectomies in the western state of Utah, compared with 74% in Connecticut, on the east coast. In the San Francisco and Oakland area, only 39% of women had radiotherapy after lumpectomy, compared with 74% in Hawaii. Of women treated with mastectomy, 34% in the San Francisco and Oakland area and Seattle had axillary dissection compared with 54% in Atlanta, Georgia, in the east (*Journal of the National Cancer Institute* 2004;96:443-8).

Lead author Dr Nancy Baxter, assistant professor of surgery at the University of Minnesota in Minneapolis, said: "Patients don't differ, but patient preferences and physician and institutional preferences do. Women don't go demanding radiation; it's recommended or not by the physician or institution." Rural patients may choose mastectomy because it's difficult to travel long distances for radiation, she said.

"There are no currently accepted treatment guidelines for ductal carcinoma in situ," Dr Baxter explained. Treatment is individualised based on whether the disease is localised or widespread. "In general, studies say that breast conserving therapy is safe and radiation reduces the risk of invasive breast cancer," she said. Mastectomy may be needed when abnormal tissue is found throughout the breast, but axillary dissection is not recommended, she said.

Doctors don't know which cases of DCIS will progress to invasive breast cancer, and some women may not need radiation, but it is currently unclear which do and which don't, Dr Baxter added.



Women in Connecticut with ductal carcinoma in situ (pictured above) are almost 50% more likely to have a lumpectomy than comparable women in Utah

The study showed that 55% of women treated with DCIS in 1992 did not receive radiation after lumpectomy; in 1999 46% were not given radiotherapy. Even among women with comedo histology (indicating more aggressive disease), 33% were not treated with radiation.

Dr Baxter recommended that studies should look at controversial areas, such as factors influencing progression of DCIS to breast cancer and clarifying which patients should receive radiation.

In an editorial in the same issue of the journal (pp 424-5), Dr Monica Morrow of Northwestern University in Chicago said that, although mortality associated with DCIS was low, recurrence ranged from 1-2% at 10 years after mastectomy to 32% at 12 years after excision alone.

The incidence of DCIS increased by 73% from 1992 to 1999, probably due to increased use of mammography. However, the incidence of patients with comedo histology, a sign that the tumour is aggressive, had not changed. Only 1.9% of patients with DCIS died of breast cancer within 10 years. "Treatment in DCIS is more properly considered the prevention of invasive carcinoma," she concluded. □

Canadian doctors welcome public health initiatives in wake of SARS

Barbara Kermode-Scott *Calgary*

The Canadian government has committed $C665m (£280m; $US500m; €415m) over three years to various new public health initiatives, including a national public health agency, a national immunisation strategy, and a pan-Canadian public health network.

The new Canadian public health agency will play a similar role in Canada to that played by the Centers for Disease Control and Prevention (CDC) in the United States. Like the CDC, the Canadian agency will focus equally on the prevention of infectious and chronic diseases and of disabilities.

It will build on existing public health services, resources, and expertise at Health Canada (the Canadian health ministry) and across Canada to coordinate a national public health response to disasters and emergencies. Steps are being taken to recruit a chief public health officer to manage and lead the agency, which is being dubbed "CDC North."

Various recent events have underscored the urgent need for decisive action to protect the health of Canadians, says Health Canada. In 2003, the outbreak of severe acute respiratory syndrome (SARS) tested Canada's readiness to deal rapidly and effectively with public health threats. In 2004, different challenges—such as the continuing spread of West Nile virus across Canada, bovine spongiform encephalopathy (BSE), and avian flu—are testing Canada's public health systems.

The Canadian Medical Association welcomed the government's investment in a sound and strong public health system as a new beginning for public health in Canada. The association's president, Dr Sunil Patel, claimed that Canada's public health systems had been chronically underfunded.

"We did not have the capacity to deal with the SARS crisis," explained Dr Patel. "The fact that this money has been allocated does not mean that we are prepared as of today to fight another SARS… What we would like to see the government of Canada do is to make sure that there is money for public health for decades to come."

The lessons that Canada has learned from its response to SARS and other emerging infectious diseases will ultimately help not only Canadians but also other countries that experience similar problems, he added. "There's been an international lack of awareness in terms of public health."

The association also applauded the Canadian government's $C400m investment in a national immunisation programme. Each Canadian province and territory currently operates its own vaccination programme. This system has resulted in some inequalities between the provinces in the way that children are protected from certain infectious diseases. In future, all Canadian children and adolescents should have access to the same vaccines. "This is an excellent first step," said Dr Patel.

The aim of the proposed pan-Canadian public health network is to improve collaboration between the provinces, territories, and Health Canada on public health issues. □