

## **Study supports shorter radiation treatment for breast-cancer victims**

By Carmela Fragomeni

An Ontario study on breast-cancer radiation treatment is expected to lead to shortened and improved therapy for women around the world.

The study findings, published in February in the *New England Journal of Medicine*, provide more evidence that a three-week course of daily radiation already in use in Hamilton and other Canadian cities is just as effective as the standard five-week regimen used elsewhere in early-stage breast cancer.

Although the effectiveness has been reported and published before, this study puts to rest a concern that the shortened treatment could cause increased long-term toxicity in survivors due to slightly higher daily doses of radiation given in the condensed time.

That concern made doctors, especially in the United States, reluctant to use the shorter treatment, according to lead author Dr. Tim Whelan, a radiation oncologist at the Juravinski Cancer Centre in Hamilton.

So Whelan and the other researchers evaluated 455 lumpectomy patients from the original clinical study conducted from 1993 to 1996 after 10 years and found the level of toxicity is no better or worse than in a course of five weeks of radiation.

“It’s the same level of toxicity,” Whelan said. “The effectiveness continues to be as good (as the five weeks).”

“It was very important to confirm the treatment remains effective and toxicity over a long time is the same.”

It’s an important finding too for the U.S. because a significant portion of women there don’t have health-care coverage and the shorter the treatment the less expensive it is, he added.

Radiation reduces the reoccurrence of cancer by 75 per cent in the breast, said Whelan. But radiation can also cause toxicity many years after treatment and can also increase over time.

Whelan expects use of the three-week radiation therapy to increase across Canada and to be adopted worldwide.

The shortened treatment, used in Hamilton since 2000, is easier on patients and reduces travel costs for out-of-towners.

“Five to six weeks can be a long time, every day,” said Whelan. “It’s difficult for women who are elderly or infirm... and if you live far away.”

The three-week radiation also saves the health-care system money, reducing costs by almost 40 per cent – an important saving that Whelan said can be redirected to more expensive treatments for other cancers.

The shorter course also allows other cancer centres to treat more women and reduce breast cancer therapy wait times, something Hamilton doesn’t have.

“Up to 40 per cent more women (worldwide) can be treated if this is widely adopted,” Whelan said.

Although patients receive a slightly higher dose of daily radiation than in the five-week treatment, the overall radiation exposure is less due to fewer days of exposure, Whelan said.

“That’s why we think it would be safe. It’s more intense, but there’s not as much radiation.”

Whelan is now studying a further reduction to a one-week treatment period of doses given twice a day in a new clinical study of 1,500 women.

– *From the Metroland newswire*