CMAJ NEWS

Raising awareness of breast reconstruction options

atie Evans had a mastectomy 17 days after she was diagnosed with breast cancer in March 2011. Surgeons removed her right breast and inserted an expander under her chest muscle to stretch the tissue in anticipation of a silicone implant. She now knows there were other options she was not informed about.

"I was essentially told, 'It's either no breast or implant," said Evans, 29, who lives in Ottawa, Ontario.

Informing other women who have undergone mastectomies of their choices is one reason Evans recently attended Breast Reconstruction Awareness (BRA) Day in Ottawa. The event — which began in 2011 in Toronto, Ontario, and is now held in 25 countries — gave women an opportunity to hear from medical specialists, including oncologists and a plastic surgeon.

Women who had undergone reconstructive surgeries also shared their stories. Some let other women see their reconstructed breasts in private rooms. Evans was one of several women who have had breast cancer who provided a chance for people to ask questions in a relaxed setting.

"Maybe I would have made a different decision if I had been given all the information right at the beginning," Evans said, "so any time I can help newly diagnosed women deciding to venture down different avenues, I always do."

One in nine women will develop breast cancer in her lifetime, according to the Breast Cancer Society of Canada. The overall five-year survival rate for women is 88%. Of the women who choose to undergo a mastectomy, however, not many opt for reconstructive surgery. BRA Day seeks to change this, and its popularity suggests that women want to know their options.

Historically, Canada has a particularly low breast reconstruction rate, according to a 2011 review published in *CMAJ*. Lack of awareness, long



Implants are an option for women interested in breast reconstruction, but they aren't the only option.

wait times, socioeconomic or cultural differences and age all play a part in low rates for this covered health care service.

In Ontario, only 7.9% of women had breast reconstruction following mastectomy in 1994–1995, virtually unchanged since the mid-1980s. In Nova Scotia, the rate was only 3.8% between 1991 and 2001.

In England, meanwhile, 16.5% had breast reconstruction following mastectomy in 2006–2009. In Denmark, the rate was 14%. Statistics vary across the United States but rates are higher than in Canada and have been increasing over the past decade. For example, in California in 2007, almost one-third of women had breast reconstruction after mastectomy.

But interest does appear to be growing in Canada. "More and more women are seeking reconstruction," said Dr. Kirsty Boyd, a plastic surgeon at The Ottawa Hospital's Women's Breast Health Centre, who gave a presentation about breast reconstruction options at BRA Day.

Women can choose implant-based reconstruction, which requires the chest muscle and skin to be stretched with a tissue expander that is gradually filled with saline until there is a pocket the correct size for the desired implant.

Another option is autologous tissue reconstruction, during which tissue from elsewhere on the body is transplanted to the breast area. This procedure has longer recovery times and a higher risk of complications, but produces a breast that feels more natural and expands or shrinks with the rest of the body.

"There will always be some women for whom reconstruction doesn't feel like a good fit, but I think that the majority of women in the past weren't even aware of what the options were, and some of the techniques weren't available," said Boyd. "Whatever decision women make, they need to make an informed decision."

Another option becoming available to more women, one that has been associated with higher rates of reconstructive surgery, is immediate reconstruction. This is when women undergoing mastectomies for early-stage cancer or as a preventive measure (who will not require radiation therapy) have reconstructive surgery on the same day.

These surgeries are commonplace in the US, following recommendations from the Commission on Cancer of the American College of Surgeons in 2001 that surgeons incorporate immediate reconstruction into the treatment of early-stage cancer.

A new program at The Ottawa Hospital's Riverside Campus is also offering immediate reconstruction. The benefits to patients are shorter wait times, having one recovery period instead of two, and avoiding the potentially jarring experience of going to sleep with breasts and awaking without them. Also, the results are likely to be better, especially if the first surgeon can do a skin-sparing mastectomy, leaving more for the plastic surgeon to work with and helping preserve the natural shape of the breast. — Catherine Cross, *CMAJ*

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