

## BREAST RECONSTRUCTION: NO NEED TO “BREAK NEW GROUND”

I would like to respond to the commentary “Oncoplastic and reconstructive breast surgery in Canada: breaking new ground in general surgical training” by Peiris and colleagues.<sup>1</sup> First, I completely agree with the notion that breast reconstruction is beneficial for many women undergoing mastectomy or significant volume loss with breast-conserving surgery. The corollary of this is that all women facing this type of surgery must be informed of all treatment options. Both Alberta<sup>2</sup> and Ontario<sup>3</sup> (using evidence-based approaches with multi-disciplinary panels that included breast oncologists and plastic surgeons) have recommended standardized information about breast reconstruction early in the decision-making process, encompassing all types of breast reconstruction, including implant-based, autologous flap, and combination reconstructions (i.e., autologous with implant).

In Canada, the only surgeons trained to discuss and provide all of these options are Royal College-certified plastic surgeons. This expertise is currently embedded in the Royal College’s objectives of training in plastic surgery and will be a key part of competency by design at all levels of training after transition to discipline. While volume-replacement breast reconstruction is part of the surgical practice of some oncologic breast surgeons in Europe, this is not the case in Canada. In fact, there are many aspects of surgical care that are different between the jurisdictions. One obvious example is the role of a trauma surgeon in Europe which involves treating extremity, abdominal, thoracic and central nervous system trauma. In Canada, this spectrum of expertise rests in multi-

disciplinary teams, and there appears to be no reason to change.

The same holds true for breast cancer surgery and breast reconstruction. Peiris and colleagues state “a lack of plastic surgeons specializing in breast reconstruction is often cited as the main reason for low rates of immediate breast reconstruction in Canada. It therefore stands to reason that increasing the number of surgeons performing immediate breast reconstruction will increase rates.” This statement is erroneous in multiple aspects. Although all plastic surgeons in Canada are trained in breast reconstruction, Platt<sup>4</sup> found that there was a strong correlation between rates of breast reconstruction and the presence of a plastic surgeon in the hospital where the mastectomy was done; that is, the issue is not that plastic surgeons lack breast reconstruction skills but rather the lack of plastic surgeons. However, there are equally important factors limiting the rates of breast reconstruction, including a persistent and erroneous belief among ablative surgeons and medical and radiation oncologists that reconstruction will delay adjuvant therapies or “hide” tumour recurrence.<sup>5</sup> Finally, a lack of dedicated operative resources for breast reconstruction is a significant impediment because it requires complex coordination among general surgeons and reconstructive surgeons, and there is a legitimate concern on the part of general surgeons that their already scarce operative time will be taken up with potentially long reconstructive procedures after they have completed a mastectomy. In our institution, dedicated ablative/reconstructive operating time allows both plastic surgeons and general surgeons to run concurrent clinics and surgical lists once they have completed their portion of the breast procedure.

Our position papers<sup>6,7</sup> argue for general surgeons, plastic surgeons, radiologists, medical oncologists, radiation oncologists and dedicated nursing staff to work in a multi-disciplinary team. We agree that the general surgeon trained in breast repositioning techniques should complete level I and level II surgery and that this represents a significant advancement in breast-conserving surgery. However, we strongly endorse that volume replacement (e.g., implants, autogenous tissue) and significant volume reduction (e.g., breast reduction) only be done by a combined general surgery and plastic surgery team. This supports the concept of the right surgeon doing the right procedure at the right time, ensures that women will be informed of all of their reconstructive options, takes advantage of the expertise of all team members and provides the best outcomes for patients.

An optimal future for patients does not rest with physicians “breaking new ground” outside the scope of their training, but instead in modifying the health delivery system to foster integrated, multi-disciplinary teams in which shared learning, innovation and expertise become routine. For instance, to address the regional variation in rates of breast reconstruction, we are investigating care pathways that would allow mastectomies to be done in community hospitals followed by expedited assessment for so-called “delayed immediate reconstruction.” The care of patients with breast cancer is a “team game,” and we encourage all surgeons caring for these patients to become involved in the formation of a team in their community and region.

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**AUTHOR RESPONSE TO “BREAST RECONSTRUCTION: NO NEED TO ‘BREAK NEW GROUND’”**

We thank Douglas Ross for his letter<sup>1</sup> in response to our recent commentary<sup>2</sup> in which we compare breast surgical training and practice in Canada to that in the United Kingdom.

We knew that this would be a controversial — and perhaps emotive — topic, and it is this very reason that we firmly believe a line of dialogue should be opened addressing this issue. Most of the opposition to the notion of general/breast surgeons performing immediate breast recon-

struction (IBR) will, understandably, come from members of the plastic surgery community.

First, a case of misunderstanding. In our paper, we suggested that “a lack of plastic surgeons specializing in breast reconstruction” is one of the main reasons for comparatively lower rates of IBR in Canada. Dr. Ross suggests that in fact a “lack of plastic surgeons” in the hospital where the mastectomy is being performed is the main contributory factor, citing Platt and colleagues’ paper published in the *World Journal of Surgery*.<sup>3</sup> We would argue that this is surely the same thing. Zhong and colleagues reported barriers to breast reconstruction in Ontario.<sup>4</sup> As would be expected, when there are no reconstructive breast surgeons in a hospital performing mastectomy surgery, the IBR rate is 0%; when 1 reconstructive breast surgeon is present, the IBR rate is 10.5%; and when 2 or more reconstructive surgeons are present, the IBR rate almost doubles to 19%. If Dr. Ross, and the breast cancer-treating community, agree that IBR is a positive and constructive step, then surely improving access to, and rates of, these procedures should be welcomed. As long as the surgeons performing these procedures have appropriate training at a high-volume centre, a body of experience reflecting expertise in these procedures and evidence to confirm low rates of complications, then their surgical background and route of training should not be relevant.

The UK Intercollegiate Surgical Curriculum Project (ISCP) publishes and updates the training curriculum and learning objectives for the various surgical specialties in the United Kingdom and is overseen by the Joint Committee on Surgical Training. The ISCP syllabus for general surgical trainees in the UK wishing to pursue a career in breast surgery lists both immediate and delayed implant-only breast reconstruction and

implant-assisted pedicled-latissimus dorsi breast reconstruction as procedures that qualifying trainees should be “competent to perform without assistance and deal with the complications that arise.”<sup>5</sup> All qualifying British general surgeons wishing to perform breast surgical oncology should therefore have this skill set as a minimum requirement.

Dr Ross’s second point relates to a “persistent and erroneous belief amongst ablative surgeons and medical and radiation oncologists that reconstruction will delay adjuvant therapies or ‘hide’ tumour recurrence.” In making this point, he incorrectly cites Khayat and colleagues’ paper published in the *Canadian Journal of Surgery*.<sup>6</sup> We believe he meant to cite Coroneos and colleagues’ paper published in *Breast* in 2017.<sup>7</sup> This paper summarizes a survey sent to general surgeons, surgical oncologists, plastic surgeons and medical/radiation oncologists regarding beliefs and practice patterns among physicians treating breast cancer. The study describes significant variation in reconstructive practices and advice given by the various specialties involved – some of which contradict national and international guidelines. We would suggest, however, that rather than restricting the scope of practice of oncoplastic/reconstructive breast surgeons, this would surely be an argument for creating “total breast surgeons” with cross-specialty training in all aspects of breast cancer care – both ablative and restorative.

Dr Ross’s final point seems to be the most confusing. He comments on the “legitimate concern on the part of general surgeons that their already scarce operative time will be taken up with potentially long reconstructive procedures after they have completed the mastectomy.” We feel this comment does not seem relevant to the main message of our paper: the concept of expanding the Canadian