

## COMMUNICATION

## Breast Reconstruction: Closing the Loop after Breast Cancer

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It is winter and I'm assigned to cover some shifts in the radiation oncology clinic on a research project. A few months ago, I got to meet her as a patient for the first time, and today after several visits, I see her for the last time. Across her chest, she carries two large battle scars. Her eyes reflect deep sorrow and tremendous fatigue, but at the same time a strong desire to live. Having endured months of chemotherapy, radiation and surgery, she knows her personal crusade has finally come to an end. She has passed through the tough journey, at least for now. As her last radiotherapy session ends and she begins to walk away, she stops suddenly and turns back to face me. Looking into my eyes she says timidly: "Thank you. I've made it, I'm ready to move on".

Breast cancer continues to be the second deadliest malignancy in women. However, compared to past decades, studies have shown that the combination of modern post-mastectomy radiation therapy, chemotherapy with receptor antagonists and surgery, significantly improves survival and reduced loco-regional recurrence. These efforts have achieved a five year survival greater than 89% [1-3]. However, while so many women can achieve a normal life after eradicating cancer, the breast cancer chronicle remains uncompleted for 7 out of 10 survivors because they are not whole [4]. Breast reconstruction continues to be neglected in many areas and considered an optional cosmetic procedure, leaving patients with a persistent reminder of their disease.

Multiple clinical studies have demonstrated through validated assessment tools (BREAST-Q, RAND-36, General Health Question-

naire GHQ) that breast reconstruction really matters, significantly improving psychological well being, self-image, sexuality, as well as overall functionality and strength to overcome disease. The benefits are not exclusive for the younger population, Sisco et al. [5] corroborated that improvement on the quality of life does not diminish with age. Despite this recent knowledge, only around 30% of patients undergoing mastectomy are made aware of the options for restoration, and these rates are even lower in underserved areas and in minority populations [4].

In the last decade, rates of breast reconstruction have been increasing at only a modest pace [6]. A recent Australian study [7] proves that by offering every mastectomy patient the option of reconstruction during a multidisciplinary visit, the likelihood of breast reconstruction increased from the national average of 12% to 41%. While many factors influence each patient's individual decision to proceed or not to proceed with reconstruction, only through raising awareness we will be able to provide truly comprehensive care to every patient.

Furthermore, campaigns such as the Breast Cancer Awareness Month, (October of every year, <http://www.bradayusa.org>) started in 2012 and propelled by the American Society of Plastic Surgeons (ASPS) and The Plastic Surgery Foundation (PSF), the effort to "educate, engage and empower women to make the decision that is best for them following a diagnosis with breast cancer" has acquired a strong presence in the care of cancer patients.

These types of campaigns inform patients on the next step after such a traumatic and life-changing process. Raising awareness also helps support research to improve the available options. Worldwide, professionals from either the research labs or the operating rooms, strive every day to discover novel options for reconstruction—exploring autologous or synthetic based techniques—aiming to be less invasive, safer and more successful. It is important that this effort does not stop after October.

As physicians involved at multiple levels in the treatment of breast cancer patients, it is our duty to understand the basics of diagnostic and treatment options for our patients, but also to promote specific counseling about the potential benefits of reconstruction within the medical and general communities. Raising awareness about breast reconstruction enables more women to consider it as an option that for many will translate into an improved quality of life as a breast cancer survivor.

### References

1. Clarke M, Collins R, Darby S, et al. Effects of radiotherapy and of differences in the extent of surgery for early breast cancer on local recurrence and 15-year survival: an overview of the randomised trials.

- Lancet 2005;366:2087-106.
2. Gieni M, Avram R, Dickson L, et al. Local breast cancer recurrence after mastectomy and immediate breast reconstruction for invasive cancer: a meta-analysis. *Breast* 2012;21:230-6.
  3. Somogyi RB, Webb A, Baghdikian N, et al. Understanding the factors that influence breast reconstruction decision making in Australian women. *Breast* 2015;24:124-30.
  4. American Society of Plastic Surgeons. ASPS launches campaign to educate women about their options [Internet]. Arlington Heights, IL: American Society of Plastic Surgeons; 2012 [cited 2014 Oct 1]. Available from: <http://www.plasticsurgery.org/news/past-press-releases/2012-archives/new-survey-women-want-to-see-breast-reconstruction-results-before-cancer-surgery.html>.
  5. Sisco M, Johnson DB, Wang C, et al. The quality-of-life benefits of breast reconstruction do not diminish with age. *J Surg Oncol* 2015;111:663-8.
  6. Kruper L, Xu X, Henderson K, et al. Disparities in reconstruction rates after mastectomy for ductal carcinoma in situ (DCIS): patterns of care and factors associated with the use of breast reconstruction for DCIS compared with invasive cancer. *Ann Surg Oncol* 2011;18:3210-9.
  7. Wong A, Snook K, Brennan M, et al. Increasing breast reconstruction rates by offering more women a choice. *ANZ J Surg* 2014;84:31-6.