





Association of Breast Surgery (ABS)
British Association of Plastic, Reconstructive & Aesthetic Surgeons (BAPRAS)
Breast Cancer Now (BCN)

Guidance for the Commissioning of Oncoplastic Breast Surgery

Lead Author: Fiona MacNeill

Working Group:

Julie Doughty
Ashu Gandhi
Richard Haywood
Chris Holcombe
Maraid McKenzie
Joe O'Donoghue
Mark Sibbering

June 2018

Background

Breast cancer (BC) is diagnosed in 55,000 women every year in the UK; half of whom are below 60 years. Incidence rates have risen dramatically over the past 25 years in all age groups¹ but survival is improving². For such a common and increasingly curable disease the quality of future life assumes vital importance³.

Maintenance of body image is crucial for high quality survivorship

Breast surgery remains the single most important BC treatment but up to two thirds of BC survivors have concerns over changes in body image⁴, especially younger women⁵. High quality breast conservation improves quality of life when compared to mastectomy and breast reconstruction improves psychosocial and sexual well-being when compared with mastectomy alone⁶⁻⁹. Optimal rehabilitation of breast cancer survivors is essential for individuals and for society, bringing significant socio-economic benefits¹⁰. Thus, access to breast reconstruction if mastectomy is required forms part of the NICE Breast Cancer Quality Standard, updated March 2017¹¹ and the Scottish Intercollegiate Guidelines Network guidelines 134¹². Of equal importance is access to oncoplastic breast conservation techniques to maintain the breast appearance after partial breast excision¹³.

Modern breast surgery is oncoplastic

Modern breast cancer surgery is now referred to as 'oncoplastic breast surgery': The combination of optimal cancer removal surgery with plastic surgery techniques to maintain or replace the breast shape. Oncoplastic surgery ranges from hidden scar placement or 'simple' breast remodelling to complex remodelling (therapeutic mammoplasty/local tissue flaps) and total breast reconstruction after mastectomy using implants, a woman's own tissue (autologous) or a combination of both. There is a trend to using more complex oncoplastic conservation techniques to maintain the breast appearance and also minimise the need for mastectomy and any subsequent reconstruction with its associated complications and potential need for multiple future procedures.

Scope of oncoplastic breast surgery

Of all women with newly diagnosed BC about half require or choose mastectomy and the other half are suitable for breast conservation. The 2009 National Mastectomy and Breast Reconstruction Audit¹⁴ identified a total of 4,796 breast reconstructions (reconstruction rate of 21%). The vast majority were at the same time as mastectomy (immediate) and the rest were at a time unspecified after mastectomy (delayed). Recent Getting it Right First Time (GIRFT) Hospital Episode Statistics (HES) data analysis (personal communication) shows rising rates of immediate reconstruction and over 6,000 complex oncoplastic conservation operations.

Some women do not want reconstruction and are happy to use an external breast prosthesis in their bra, others prefer to have the opposite breast removed to help them achieve symmetry, some are not suited to immediate breast reconstruction or symmetry surgery on the opposite breast, because of cancer related factors. Woman make decisions regarding reconstructive or symmetry surgery in very different time frames.

Why oncoplastic breast surgery may require more than one procedure

The aim of oncoplastic surgery is usually to match the opposite breast but sometimes this is not feasible or desirable so surgery may be required on the opposite breast to achieve symmetry (balancing surgery). This may be done at the time of the initial cancer surgery or at a later date.

Mastectomy (with or without reconstruction) on an unaffected breast with the primary aim of achieving symmetry may be reasonable under certain circumstances¹⁵ but this discussion is beyond the scope of this document. Further information can be found in the Clinical Guidance section of the ABS website.

Due to the complexity of cancer and patient related factors that may impact on achieving breast symmetry, oncoplastic breast surgery is usually a programme of operations: the initial procedure including the cancer removal followed by 2 or 3 second stage 'adjustment' surgeries over 18-24 months to optimise appearance and symmetry.

Maintaining breast symmetry longer term can be challenging as both breasts may change with time, especially if one side has been irradiated. For example up to 20% of women need to undergo autologous reconstruction 5 years or beyond the index procedure to salvage irradiated implant reconstruction.

Evidence base for oncoplastic surgery

Currently the evidence base for oncoplastic surgery, a relatively new speciality, is limited. For example, we do not know which breast reconstruction technique delivers the best outcome for any individual patient and we do not yet know the most cost effective technique. It may be that we can never define or precisely determine these due to the many complex factors involved, including supporting patient choice and surgeon technique selection.

Additionally we do not know the average number of procedures required to optimise a reconstruction. However, much work is currently being undertaken to improve the evidence base and as this information becomes available this document will be updated.

Background to the oncoplastic surgery guidance document

In early 2017 a Clinical Commissioning Group (CCG) decided not to support a request for symmetry (balancing) surgery after complex oncoplastic breast conservation. This decision reached the public domain and attracted considerable adverse publicity with regards to 'post-code' treatment access.

BCN set up a Freedom of Information (FOI) enquiry which demonstrates that while most (77%) CCGs in England do not have formal policies restricting oncoplastic surgery, there is significant variation across England regarding the provision of this service. Just over 20% of CCGs had formal policies on oncoplastic/reconstructive surgery for breast cancer.

These included:

- Restricting surgery on the unaffected breast
- Limiting the number of oncoplastic procedures and adjustments to a maximum of 4
- Defining a time frame for completion of reconstructive surgery up to 5 years after the primary cancer/oncoplastic surgery and/or clinic discharge

In general, cancer patients were exempt from the general exclusions on pure cosmetic breast surgery such as breast reduction and uplifts (mastopexy), breast enlargement (augmentation) etc. However, a number (4.3%) of CCGs responded to the FOI request with unclear, informal or draft policies. This lack of clarity between cancer patients and cosmetic surgery patients regarding the commissioning of breast reconstruction/oncoplastic services raises concern. It suggests a lack of understanding of the potential complexity of oncoplastic/reconstructive surgery and the vital importance of this surgery to the recovery and welfare of many women being treated for breast cancer.

For adjustment surgery that fell outside of the policy restrictions, CCGs requested an application for funding via the Individual Funding Request (IFR) process on the grounds of "clinical exceptional circumstances." One CCG deemed further adjustment surgery 5 years after diagnosis as cosmetic rather than aesthetic. Our patient representative has commented that the range of restrictions diminish the fact that oncoplastic breast surgery is an essential component of recovery and can never be regarded as cosmetic.

Aim of the guidance document

BCN, ABS and BAPRAS are charitable societies devoted to improving breast care, in particular oncoplastic breast surgery. As responsible organisations we would like to work with the commissioners so they can understand the breadth and complexities of oncoplastic breast surgery.

We recognise that numerous repeat adjustment surgeries to achieve or maintain breast appearance and/or symmetry are not desirable for patients, providers or commissioners. Oncoplastic surgery must not only be of the highest quality but must also represent value for money and as a principle every effort must be made to achieve the best outcome by using the best technique for the individual patient with as few adjustment surgeries or the need for complex salvage surgery as possible. However we must ensure that patients are not penalised if they have a complication that requires multiple revision surgeries or they do not achieve an 'acceptable' outcome in the first 2-3 surgeries.

This is the first time such a guidance document has been written for oncoplastic breast surgery and in the absence of clear evidence or standards with regards to best practice and what 'good looks like' the recommendations represent the consensus opinion of experts and patient advocates. We understand a balance has to be achieved: Open-ended commissioning is not sustainable or desirable as it does not encourage service improvement, but commissioning restricted by procedure numbers and/or timeframes risks penalises patients.

ABS and BAPRAS will continue to improve the evidence base for oncoplastic surgery through thorough evaluation and research. We will also define what high quality oncoplastic surgery 'looks like', and establish national service and outcome benchmarks against which units will be assessed to minimise variations. This will help us to drive up standards of care nationally and refine commissioning. The GIRFT NHSI project will be instrumental in driving this as will the new implant and flap registries.

The document will require regular review and adaptation as the evidence base grows with regards to techniques and appropriate number of adjustment surgeries.

Guidance for Commissioners

All patients should have access to the full range of oncoplastic surgery to optimise cancer
and aesthetic outcomes and support high quality survivorship. As the evidence base
improves, greater clarity on the average number of procedures required to achieve an
optimal outcome will be provided.

This includes:

- The full range of oncoplastic conservation procedures.
 Most WILL NOT require any additional adjustment procedures¹³
- **b.** The full range of breast reconstruction techniques when mastectomy is required. MOST WILL require additional adjustment procedures
- **c.** The full range of symmetry/adjustment procedures (nipple reconstruction, surgery on the opposite breast, lipomodelling etc). This list is illustrative of the more common procedures and is not exhaustive.
- d. Delayed breast reconstruction and adjustment symmetry surgery cannot be time restricted as women make their decisions in very different timeframes, based on personal (emotional, family, need to return to work, etc) and treatment related factors.
- e. For women whose primary oncoplastic/reconstruction surgery fails due to acute or late complications (usually radiotherapy related, often many years after index surgery) additional surgeries will be required and this may be a repeat reconstruction, usually autologous. For example: skin envelope necrosis, implant infection requiring removal, complete or partial flap failure, chronic radiation induced changes, implant migration or leakage, breast implant associated lymphoma etc. For the purpose of this document acute complications are within a year of surgery and late any time after. This can be decade or more after the primary surgery.
- 2. Units commissioned to offer oncoplastic breast surgery must:
 - a. provide evidence of good practice through:
 - · Participation in the national Flap and Implant registers
 - Following Oncoplastic Guidelines and surgical site infection management¹³
 - b. Have the necessary breast surgery and plastic surgery knowledge and expertise to optimise patient and technique selection
 - c. Have the relevant breast and plastic surgery skills and expertise to provide the excellence of care required to achieve the best aesthetic outcomes with minimal complications and repeat surgeries.

References

- 1. www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/breast-cancer/incidence-invasive
- 2. Office for National Statistics. Cancer survival in England: Adults diagnosed in 2009 to 2013, followed up to 2014. Newport: ONS; 2015
- 3. Runowicz CD, Leach CR, Henry NL, et al. American Cancer Society/American Society of Clinical Oncology Breast Cancer Survivorship Care Guideline. CA: A Cancer Journal for Clinicians. 2016; 66: 43–73. doi:10.3322/caac.21319
- 4. Falk Dahl CA, Reinertsen KV, Nesvold IL et al. A study of body image in long-term breast cancer survivors. Cancer. 2010;116:3549-3557
- 5. Partridge AH. Cancer survivorship and the young breast cancer patient: addressing the important issues. Oncologist. 2013;18:e19-e20
- 6. Howes BH, Watson DI, Xu C, Fosh B, Canepa M, Dean NR. Quality of life following total mastectomy with and without reconstruction versus breast-conserving surgery for breast cancer: A case-controlled cohort study. Journal of Plastic, Reconstructive & Aesthetic Surgery. 2016; 69(9):1184-91
- 7. Rozen WM, Ashton MW, Taylor GI. Defining the role for autologous breast reconstruction after mastectomy: social and oncologic implications. [Review] [132 refs]. Clinical Breast Cancer. 2008; 8(2):134-42
- 8. Eltahir Y, Werners LL, Dreise MM et al. Quality-of-life outcomes between mastectomy alone and breast reconstruction: comparison of patient-reported BREAST-Q and other health-related quality-of-life measures. Plastic & Reconstructive Surgery. 2013; 132(2):201e-209e
- 9. Wei CH, Scott AM, Price AN, Miller HC, Klassen AF, Jhanwar SM, Mehrara BJ, Disa JJ, McCarthy C, Matros E, Cordeiro PG, Sacchini V, Pusic AL. Psychosocial and Sexual Well-Being Following Nipple-Sparing Mastectomy and Reconstruction. Breast Journal. 2016; 22(1):10-7
- Living with & Beyond Cancer: Taking Action to Improve Outcomes (an update to the 2010 The National Cancer Survivorship Initiative Vision). DH, Macmillan Cancer Support & NHS Improvement. 2013
- 11. NICE Breast Cancer Quality Standards (QS12), September 2011, updated July 2016
- 12. Scottish Intercollegiate Guidelines Network. Treatment of Primary Breast Cancer. A National Clinical Guideline No 134. 2013
- Association of Breast Surgery & British Association of Plastic & Reconstructive Surgeons: Oncoplastic Breast Reconstruction Guidelines for Best Practice. 2012; ISBN: 978-0-9567937-2-0
- 14. National Mastectomy and Breast Reconstruction Audit Report 2011. NHS Information Centre.
- Boughey JC, Attai DJ, Chen SL et al. Contralateral Prophylactic Mastectomy (CPM) Consensus Statement from the American Society of Breast Surgeons: Data on CPM Outcomes and Risks. Ann Surg Oncol. 2016; DOI 10.1245/s10434-016-5443-5