



Clinical Practice Guidelines – Breast Disease Site

Guideline Title:	Recommendations for Use of Immediate Breast Reconstruction in Early-Stage Breast Cancer - Summary	Date: (O):	June 30, 2011
Tumor Group:	Breast Disease Site Group	(R):	
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Issuing Authority:	Dr. Rod Martin Clinical Chief, Surgery, Eastern Health	Date Signed:	August 20, 2012
Adapted From	National Institute for Health and Clinical Excellence (NICE) “Early and locally advanced breast cancer: Diagnosis and treatment”, February 2009 (20).		

Target Population:

The recommendations are aimed toward patients who have been diagnosed with early-stage cancer of the breast and meet the selection criteria for immediate breast reconstruction.

Recommendations:

1. All patients who require a mastectomy should be informed of the availability of breast reconstruction provided by a plastic surgeon and/or surgeon.
2. Immediate breast reconstruction (IBR) is a specialized procedure that should be available to patients requiring prophylactic mastectomy due to genetic risk and patients with in situ disease.
3. Patients with early, low-risk invasive breast cancers may also be candidates for IBR.
4. Delayed breast reconstruction is the optimal choice for patients who require radiation therapy.
5. Patient preference must be considered, as well as any pre-existing co-morbidities of the patient.
6. All candidates for IBR with biopsy proven invasive breast cancer should be presented at a multidisciplinary tumor board, where consensus can be reached on the acceptable treatments options for the patient.

Qualifying Statements:

- Evidence suggests that there is a low incidence of local recurrences after IBR and appears to be more closely associated with advanced disease at presentation (1-4). A study at M. D. Anderson Cancer Center, over a ten year period, found that a local recurrence rate of 2.3% in patients who had undergone IBR. Most local recurrences were found in the skin or subcutaneous tissue (72%), with the remainder (28%) were found in the “chest wall” (2). Also, the majority of patients who recurred locally did so in the same quadrant of their primary breast cancers (3). The present practice in the province of Newfoundland and Labrador is not to screen the reconstructed breast. Physical clinical exam is the best follow-up tool for detecting skin recurrences since most are detected this way.

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- The evidence suggests that IBR is associated with significantly higher complication rates than delayed procedures, and that procedure type had no significant effect on complication rates (5-7). Several studies have also identified patient related characteristics that may influence the risk of post op complications, which include age (risk elevated over 43 years), smoking habits, elevated BMI (body mass index), and general health (5-9). There is enough evidence to suggest that an increased BMI and a smoking history will increase the likelihood of complications, which in turn could affect the reconstruction choices being offered by the plastic surgeon. However, these patient characteristics should not restrict the patient's right to a plastic surgery referral.
- Though the evidence is conflicting, the potential exists for post-IBR complications to create a delay in the delivery of adjuvant chemotherapy, thereby potentially adversely affecting recurrence and survival rates (10-14). The concern is that due to significant underlying co-morbidities prevalent in this province's breast cancer patient population (i.e. elevated BMI, smoking history, heart disease, diabetes, etc...), the potential risk for treatment delay for our patients may be higher.
- Radiation results in deformation of the parenchyma, leading to retraction, fibrosis, vasculitis, and skin breakdown. Wound healing is also inhibited and the vascular supply is impaired (15). A systematic review of the available data on autologous tissue reconstruction and the optimal timing of radiation therapy found that radiation had a 'deleterious' effect on the reconstructed breast and advised delayed reconstruction as the safer option (16). Other studies, including a literature review by the M.D. Anderson Cancer Center, all conclude that the optimal approach is for patients who are to receive, or have already received post-mastectomy radiation therapy, is delayed breast reconstruction (17-19). In general, however, radiation therapy increases complications in both immediate and delayed reconstruction, with its effects more pronounced in implant-based reconstruction.

Disclaimer:

These guidelines are a statement of consensus of the Breast Disease Site Group regarding their views of currently accepted approaches to diagnosis and treatment. Any clinician seeking to apply or consult the guidelines is expected to use independent medical judgment in the context of individual clinical circumstances to determine any patient's care or treatment.

Contact Information:

For more information on this guideline, please contact Dr. Joy Cluett MD FRCPC, Health Science Center, St. John's, NL; Telephone 709-753-4600. For the complete guideline on this topic or for access to any of our guidelines, please visit our Cancer Care Program website at www.easternhealth.ca

Literature Support:

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