



Local and Systemic Therapy for Local Recurrence After Primary Surgery

Approximately 80%-90% of breast cancer local recurrences appear within five years after primary therapy. One-fourth to one-third of patients with local or regional recurrence have had preceding distant metastases. Another one-fourth of patients are diagnosed as having simultaneous local and distant failure or develop distant metastases within a few months of the local recurrence. The management of these patients continues to evolve and a gold standard for treatment is controversial. Should patients who initially had breast-conserving surgery now have a mastectomy, or is re-excision appropriate? What is the role of radiotherapy and chemotherapy? Should tamoxifen be discontinued and should the patient be started on an aromatase inhibitor and/or ovarian ablation? The answer to these questions are determined according to thoughtful consideration of the clinical and pathological characteristics of the patient at the time of recurrence.

SURGERY FOR LOCAL RECURRENCE

"Although salvage mastectomy is currently the standard surgical treatment for IBTR [ipsilateral breast tumor recurrence], a small series has shown that breast conservation plus salvage radiotherapy to the operative area is well tolerated and results in reasonable long-term local control of the disease. This strategy needs to be further explored and eventually compared directly with salvage mastectomy."

—Mamounas EP. *J Clin Oncol* 2001;19(18):3798-3800.

CHEMOTHERAPY FOR LOCAL RECURRENCE

"Although there are few retrospective studies to address the care of patients with local-regional recurrent nonmetastatic breast cancer, treatment consisting of complete surgical excision, comprehensive irradiation and systemic therapy is now considered the standard of care by many. The role of chemotherapy is perhaps the most controversial aspect of treating local-regional recurrence after mastectomy."

—Ballo M et al. *Int J Radiat Oncol Biol Phys* 1999;44(1):105-112.

PROPOSED TRIAL OF XT IN LOCAL RECURRENCE

We are planning a trial to determine the value of chemotherapy in patients with ipsilateral breast tumor recurrence (IBTR) or local regional recurrence. These patients have not been studied prospectively, and it is not known whether chemotherapy can improve survival. Patients with IBTR and local regional recurrence have a 50%-60% and 80%-90% risk, respectively, of developing systemic disease in the next five years. In ER-positive patients, we will compare hormonal therapy with or without capecitabine / docetaxel. In ER-negative patients, we will compare capecitabine/docetaxel to no treatment. Since most of the patients will have received either an anthracycline or alkylating agent as adjuvant therapy, we chose docetaxel as a noncross-resistant agent. Capecitabine was added to obtain the maximum benefit.

—Eleftherios P Mamounas, MD

"Local recurrences occur most frequently in the skin, and the optimal treatment consists of complete excision of gross disease followed by irradiation. This approach has improved local control and survival in most series. For systemic management, antihormonal therapy should be administered concurrently with irradiation to all receptor-positive patients. Chemotherapy, using a combined or sequential application of Adriamycin and Taxol, has become a standard treatment in advanced breast cancer, but it may be ineffective in resolving local recurrence."

—Harms W et al. *Int J Radiat Oncol Biol Phys* 2001;49(1):205-10.

INNOVATIVE RADIOTHERAPIES FOR LOCALLY RECURRENT BREAST CANCERS

PDR (PULSED-DOSE-RATE) BRACHYTHERAPY

"Even applying the most appropriate treatment, local failure rates up to 52% have been reported after treatment of local recurrences. Treatment options in this situation are limited, and, due to an increased normal tissue complication probability, reirradiation is used with caution. On the other hand, 62% of the patients with uncontrolled locoregional recurrences experience severe clinical problems and an extremely impaired quality of life. As an alternative to reirradiation with electrons... PDR (Pulse-Dose-Rate) brachytherapy molds for breast cancer local recurrences is effective and provides a high local control rate with acceptable toxicity."

—Harms W et al. *Int J Radiat Oncol Biol Phys* 2001;49(1):205-10.

Clinical Research Background

MILAN SERIES OF 191 LOCAL RECURRENCE CASES AFTER BREAST CONSERVING SURGERY FOR EARLY BREAST CANCER

N= 191	TREATMENT OF RECURRENCE	
	MASTECTOMY (N=134)	RE-EXCISION (N=57)
Solitary	63%	84%
Multi-focal	17%	0%
Undetermined	20%	16%
Pathological Size (cm)		
≤ 1	34%	60%
> 1	52%	27%
Undetectable	13%	14%
Subsequent Distant Metastases	47%	20%
Overall Survival Probability at 60 Months	70%	85%

"Since the two surgical options were not randomized, no statistically reliable comparison could be obtained. Furthermore, the favourable results after re-excision could simply reflect patient selection. However, total mastectomy does not seem to prevent patients from developing distant metastases. In conclusion, half the patients were disease-free five years after reoperation. Re-excision was not disadvantageous in selected patients. Selection should include small solitary recurrences in a breast large enough to permit a satisfactory cosmetic result. The patient should be consented appropriately about the risk of a further IBTR."

—Salvadori B et al. *Brit J of Surg* 1999;86(1):84-7.

Miami Meeting Patterns of Care Study

SURGEONS

A woman is diagnosed by mammogram with an upper, outer quadrant lesion that is excised and proven to be a 0.8 cm noncomedo DCIS. The margins are clear to 1 cm. She is treated with radiation therapy and tamoxifen. Three years later, she presents with a nodule in the suture line, which is excised and found to be recurrent DCIS.

Which of the following therapies would you be most likely to recommend?

	43 YEARS OLD	65 YEARS OLD	78 YEARS OLD
LOCAL THERAPY			
Mastectomy	55%	65%	50%
Re-excision	45%	35%	35%
Undecided	-	-	15%
SYSTEMIC THERAPY			
Continue tamoxifen	55%	45%	35%
Discontinue tamoxifen, start aromatase inhibitor and ovarian ablation	15%	-	-
Discontinue tamoxifen, start aromatase inhibitor	5%	10%	30%
Undecided	25%	45%	35%

SELECT PUBLICATIONS

Ballo M et al. Local-regional control of recurrent breast carcinoma after mastectomy: Does hyperfractionated accelerated radiotherapy improve local control? *Int J Radiat Oncol Biol Phys* 1999;44(1):105-112.

Harms W et al. Results of chest wall reirradiation using pulsed-dose-rate (PDR) brachytherapy molds for breast cancer local recurrences. *Int J Radiat Oncol Biol Phys* 2001;49(1):205-10.

Itoh Y et al. Readministration of tamoxifen after adjuvant therapy for recurrent breast cancer. *Breast Cancer* 2000;7(2):149-52.

McCormick B et al. Local regional recurrence and salvage surgery. *American College of Radiology. ACR Appropriateness Criteria. Radiology* 2000;215 Suppl:1181-92.

Salvadori B et al. Reoperation for locally recurrent breast cancer in patients previously treated with conservative surgery. *Brit J of Surg* 1999;86(1):84-7.

Solin LJ et al. Salvage treatment for local recurrence after breast-conserving surgery and radiation as initial treatment for mammographically detected ductal carcinoma in situ of the breast. *Cancer* 2001;15;91(6):1090-7.