

Management of Local Recurrence After Mastectomy: Why Reconstruction Type Matters

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Dear Editor,

Breast cancer remains the most common malignancy among women worldwide and continues to represent a major cause of cancer-related mortality.^{1,2} Although locoregional recurrence after mastectomy is relatively uncommon, its management remains clinically challenging and requires individualized treatment planning.⁴ While current literature mainly focuses on oncologic outcomes, less attention has been paid to how previous breast reconstruction may influence the diagnosis and treatment of local recurrence.⁵

All patients with suspected local recurrence should undergo multidisciplinary evaluation and systemic staging to distinguish isolated locoregional disease from metastatic recurrence.^{6,7} Biological subtype, receptor status, previous radiotherapy, patient factors, and reconstructive history should all be considered during treatment planning.⁸

In patients without reconstruction, recurrence typically develops along the surgical scar or chest wall.⁴ When technically feasible, surgical excision remains an important component of local treatment, often combined with radiotherapy and systemic therapy according to previous treatments and tumor characteristics.⁹

Figure 1 demonstrates a 65-year-old woman who developed a parasternal chest wall recurrence after modified radical mastectomy. Histopathological examination confirmed recurrent invasive breast carcinoma. Wide local excision was performed; however, close surgical margins necessitated adjuvant radiotherapy following multidisciplinary review.



Figure 1: Clinical photograph demonstrating a parasternal chest wall recurrence in a 65-year-old woman following modified radical mastectomy.

Figure 2 presents an 86-year-old patient who developed multiple incision-line recurrences six months after modified radical mastectomy. Biopsy confirmed recurrent disease. Because concomitant metastatic disease was present and surgical resection was not feasible, radiotherapy was administered, resulting in substantial local regression.



Figure 2: Local recurrence along the incision line in an 86-year-old patient six months after modified radical mastectomy.

Management becomes more complex in reconstructed breasts. Recurrence following implant-based reconstruction may arise adjacent to the implant capsule, skin envelope, or chest wall.^{5,10} Surgical treatment must balance oncologic safety with preservation of the reconstruction whenever possible. In selected cases, implant removal may be required to achieve adequate margins. Furthermore, postoperative changes and capsular contracture may complicate surveillance and clinical examination, making advanced imaging modalities such as magnetic resonance imaging particularly valuable.¹¹

Figure 3 illustrates a patient who previously underwent breast-conserving surgery and radiotherapy and later developed an isolated ipsilateral recurrence. Wide local excision of the recurrent lesion with adequate margins, followed by nipple-sparing mastectomy and immediate implant-based reconstruction, was performed. Despite an initially uneventful recovery, smoking resumption and poor postoperative compliance resulted in wound complications and eventual implant loss. This case highlights the influence of patient-related and reconstructive factors on treatment outcomes.



Figure 3: Early postoperative wound complication following nipple-sparing mastectomy and immediate implant-based reconstruction performed for isolated ipsilateral breast cancer recurrence.

Similarly, recurrence after autologous reconstruction may be difficult to distinguish from fat necrosis or flap fibrosis.¹² Careful radiologic evaluation is therefore essential, and in selected cases partial or complete flap excision may be required to achieve adequate oncologic margins.⁽¹³⁾ Furthermore, recurrence involving implant-based reconstructions may necessitate implant removal, with immediate or delayed autologous reconstruction representing a potential reconstructive option.

In conclusion, local recurrence after mastectomy should not be considered a uniform clinical entity. Previous reconstruction may significantly influence recurrence detection, radiologic evaluation, surgical feasibility, and treatment strategy.^{5,11-13} Recognition of reconstruction-specific challenges and multidisciplinary decision-making are essential for achieving optimal oncologic and reconstructive outcomes.

Written informed consent was obtained from the patients for publication of the clinical photographs and accompanying clinical information.

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