Incidental lobular carcinoma scar recurrence at delayed breast reconstruction 6 years after mastectomy

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Abstract A 48-year-old woman was found to have histological recurrence of lobular breast carcinoma in a mastectomy scar excised routinely during delayed breast reconstruction 6 years after a mastectomy. Prior to the subsequent wide excision of the scar, she requested prophylactic contralateral mastectomy and immediate reconstruction. The scar excision revealed positive resection margins prompting further surgery while the contralateral mastectomy showed previously undetected widely infiltrative lobular carcinoma. It is extremely rare to detect lobular carcinoma in incidental histological specimens and even rarer to encounter it in asymptomatic contralateral breasts following prophylactic mastectomy. This unusual presentation and the implications for mastectomy scar management during delayed reconstruction are discussed.

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Introduction

Infiltrating lobular carcinoma (ILC) comprises 5–10% of all breast cancers. Its 5-year risk of local recurrence after mastectomy is 4.3% versus 2.1% for the more common ductal variety.1 Recurrence is most common in the first 2–3 years (90%) and decreases with time.2,3 Nonetheless, most

British plastic surgeons routinely submit the mastectomy scars excised during delayed breast reconstruction for histological examination even though very few microscopic scar recurrences have been reported in the absence of clinical suspicion.4

Lobular breast carcinomas have a reportedly high incidence of bilaterality.5–7 This may, however, be due to a selection bias because of the greater likelihood of performing contralateral prophylactic mastectomy in women with lobular carcinoma.8 Furthermore, the incidence of contralateral lobular carcinoma may be no different from that of ductal carcinoma.1 It was therefore interesting to find a patient with an asymptomatic scar recurrence 6 years
after a mastectomy and an incidental contralateral ILC following prophylactic mastectomy.

Case report

A 42-year-old woman had undergone a mastectomy and axillary clearance for invasive and in situ lobular carcinoma with clear resection margins and 2/19 positive lymph nodes. She then received adjuvant systemic CMF chemotherapy and tamoxifen. Preoperative breast ultrasound and mammogram revealed no abnormality in the right breast.

Five years later, she presented to the plastic surgery service requesting delayed left breast reconstruction. A recent follow-up mammogram again showed the right breast to be within normal limits. Seven months later she underwent an expandable implant reconstruction at which the mastectomy scar was excised and sent for routine histology. This revealed recurrent lobular breast carcinoma extending to the lateral resection margin and lying within 2 mm of the deep margin. She therefore promptly underwent a wide (1 cm) elliptical excision of the scar, preserving the underlying implant, as well as a contralateral prophylactic mastectomy and implant reconstruction, the latter as per patient request. Her left wide excision specimen was found to contain residual lobular tumor extending to the inferior resection margin. Interestingly, the prophylactic mastectomy specimen revealed widespread invasive lobular carcinoma.

The patient therefore had a further wider left mastectomy scar excision and latissimus dorsi flap and implant breast reconstruction with a simultaneous level II right axillary clearance which showed no evidence of metastases. This was followed by radiotherapy to the right chest wall and Anastrozole (Arimidex) 1 mg daily.

A year later she developed significant right breast capsular contracture necessitating a total capsulectomy and implant exchange. No residual tumor was seen in the right mastectomy scar. At 3-year follow-up, there was no evidence of local recurrence and the patient is happy with her bilateral reconstructions.

Discussion

Although few cases of local breast cancer recurrence have been reported after 3 years, it is extremely rare to detect lobular carcinoma in incidental histological specimens and even rarer to find it in an asymptomatic contralateral breast in a patient undergoing prophylactic mastectomy.\(^2,3\) Our report therefore documents an exceptionally uncommon presentation of an infiltrating lobular carcinoma (ILC) recurrence. Not only did it take almost 7 years to be detected, the recurrence was also found incidentally in a normal asymptomatic scar. If it were not for the routine histological examination of the scar, the recurrence would probably not have been diagnosed for a long time, and possibly progressed to distant metastases.\(^3,4\)

Recurrence of breast carcinoma in a previously reconstructed patient poses a challenge for plastic surgeons. This situation effectively occurred after our patient’s delayed breast reconstruction. In order to avoid the nuisance of breast carcinoma recurrence long after the reconstruction, many British plastic surgeons routinely submit the mastectomy scar for histology at delayed reconstruction. Identification of microscopic recurrences in mastectomy scars in the absence of clinical suspicion is, however, rare.\(^4\) Consequently Soldin et al. suggested that routine histological examination of the mastectomy scar at delayed breast reconstruction was not worthwhile.\(^2\) This suggestion was challenged by others who considered that biopsing the mastectomy scar was a vital investigation which was not to be missed at the time of the reconstruction.\(^9\) The unusual case herein presented supports this latter view and lends further credence to the standard practice of submitting mastectomy scars for routine histological examination during delayed breast reconstruction.

It is very unusual for two consecutive wide excisions to yield positive resection margins in a patient who is totally asymptomatic. It was also interesting that the prophylactic mastectomy showed extensive but completely asymptomatic ILC. Although ILC is known to be difficult to diagnose by mammography,\(^10\) our patient’s normal mammogram prior to delayed reconstruction is perhaps still surprising because she was found to have extensive disease following prophylactic mastectomy. ILC has, however, been reported to have a high incidence of bilaterality.\(^5\) This is, however, controversial as other studies have suggested that the incidence of contralateral lobular carcinoma is in fact the same as that of ductal carcinoma.\(^1,8\) Even though bilaterality should always be suspected for any form of breast carcinoma, it is still surprising to find an extensive infiltrative breast carcinoma detected in a virtually healthy looking and mammographically normal breast. During follow-up examination it is important to always be on the look out for contralateral cancer.

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References


