

Importance of Histopathology in Routine Breast Surgery: A Report of Incidental Malignancy in a Routine Gynecomastia Specimen in a Very Young Patient

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ABSTRACT

Malignancy of breast is uncommon in young men, particularly in the absence of discrete lumps. Therefore, some authors recommend not sending removed tissue for histology in the correction of gynecomastia. A case of an incidental finding of *in situ* malignancy is described in one breast in a young patient with bilateral gynecomastia. The importance of routine histopathology, both clinically and medicolegally, is discussed with a review of relevant literature.

Key words: Anabolic steroid, breast carcinoma, gynecomastia, histopathology, *in situ* ductal carcinoma

INTRODUCTION

Malignancy in the male breast is rare, approximately 1% of all breast cancers, with an incidence of 1 in 100,000.^[1] Breast malignancy in a man also tends to present at a much older age, compared to women; the average age in men being is approximately 70 years.^[2,3] There are only a handful of reports of malignancy of breast in young men and also incidental finding of malignancy in gynecomastia specimen.^[2,4]

Gynecomastia is relatively common in men, particularly in young men. In most patients, it presents with gradual onset of bilateral diffuse enlargement of breast tissue. Management principles include exclusion of endocrine disorder followed by appropriate surgical treatment in most patients.^[5]

Although most surgeons would send any removed tissue for histopathology, some surgeons do not, unless there is any specific suspicious history or clinical findings. Some authors recommend against the histological examination of removed tissue, citing cost, and resource implications.^[6]

CASE REPORT

This 23-year-old otherwise fit and well gentleman presented with gradual onset of bilateral enlargement of both breasts over the past 12–18 months. There was no family history of breast diseases. He reported no pain and nipple discharge of bleeding.

Clinical examination showed bilateral Grade I gynecomastia with mild symmetrical and diffuse glandular enlargement [Figure 1]. No discrete lumps were palpable in either breast. No axillary or cervical lymph nodes were palpable. His hormonal status was checked and found to be normal before referral to the plastic surgery clinic. He was on no regular medication and did not smoke or use recreational drugs. No other risk factors for gynecomastia were noted.

He was treated with excision of glands from both breasts. The tissue was sent for histology, as is the author's routine practice. He healed uneventfully and was happy with the outcome of the surgery.

The histology report, rather unexpectedly, showed *in situ* ductal carcinoma (DCIS) in the left breast, with a diameter of 6 mm.

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Figure 1: (a-c) Pre-operative appearances, front, and side views

He was immediately referred to the local breast cancer multidisciplinary committee. He was examined in the breast cancer clinic and discussed in the multidisciplinary team (MDT) meeting. A further ultrasound scan was arranged, which showed no residual breast tissue. It was agreed that no further surgery or adjuvant treatment was needed. He was regularly followed up in the breast clinic for 12 months and in the plastic surgery clinic for 2 years before being discharged, with an open appointment to return if he had any concerns.

CONCLUSION

The DCIS in this young patient was an incidental finding. Although surgical removal of breast tissue was found to be thorough (as subsequent ultrasound scan proved), it is only the histopathological examination of the removed tissue that allowed the diagnosis and necessary precautions. Even if he had invasive malignancy, the prompt diagnosis and MDT discussion would have allowed timely subsequent treatment, ensuring a better long-term prognosis. There are also potentially serious medicolegal consequences^[7] in patients, where diagnosis (and scope of timely appropriate treatment) is missed or delayed due to lack of appropriate histopathological examination of removed tissue, in the breast or elsewhere.

The author would, therefore, recommend routine histology of all removed tissue, even in situations where the chance of a significant sinister finding is low. As our patient is probably the youngest patient to present with incidental finding of breast malignancy, this underscores the importance of not ignoring the possibility of breast malignancy in very young men.

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How to cite this article: Lahiri A. Importance of Histopathology in Routine Breast Surgery: A Report of Incidental Malignancy in a Routine Gynecomastia Specimen in a Very Young Patient. *Clin J Surg* 2020;3(1):1-2.