

**MANAGEMENT OF THE AXILLA IN
BREAST CANCER**

Essay

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General Surgery

By

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Introduction

Breast cancer is the most commonly diagnosed malignancy among women and the second leading cause of cancer death in the united states (*Edwards et al., 2002*).

Axillary lymph node status remains the single most important prognostic parameter and has therapeutic implications in patients with breast cancer (*Paganelli et al., 1997*).

But early diagnosis of breast cancer, a result of widespread use of screening mammography, has increased considerably the number of detected in situ cancer and small invasive cancer without involvement of the lymph nodes. And until now there is no conclusive study concerning of curative value of axillary dissection in patients with carcinoma of the breast (*Schafer, 1998*).

Axillary clearance of patients with early breast cancer is accompanied by a high risk of arm morbidity. Less invasive ways to establish the axillary nodal status are therefore of interest especially in women with low risk of nodal metastases (*Dahlgren et al., 2002*).

The sonographic assessment of axillary and internal mammary chain nodes, possibly in addition to core biopsy, improves the preoperative evaluation of breast cancer patients scheduled for conservative surgery of the breast (quadrantectomy) and the axilla (sentinel node biopsy) (*Nori et al., 2005*).

Various methods to obtain lymph nodes for histologic assessment in an attempt to stage the axilla have been tried (*Chetty, 2001*).

Most authorities recommend a level I and II partial axillary lymph node dissection (ALND) which generally results in removal of 10 or more lymph nodes. A partial ALND correctly stages 96% of patients with primary breast cancer (as either node-negative or node-positive) and rarely gives rise to significant lymphoedema of the upper extremity (*Marrow, 1996*). Recently, the routine use of ALND has been questioned (*Parmigiani et al., 1999*).

The four-node sampling technique has been evaluated in Edinburgh in two randomized trials comparing node sampling to level II axillary clearance. It was shown to be reliable for staging the axilla; and in those who are node-negative, no further treatment is required (*Chetty, 2001*).

Sentinel lymph node biopsy (SLNB) in which the 1st node to drain the tumor bearing area is identified and excised, is investigated as an alternative to the dissection of the entire axilla. It has been demonstrated in recent studies that SLNB is feasible and safe. However, several problematic aspects of this method still requires resolution (*Veronsi et al., 1998*).

An alternative treatment to axillary clearance is primary axillary radiotherapy which produces results similar to those of axillary clearance. However, this technique gives no information of axillary status and induces high morbidity comparable to that of surgical dissection (*Hoeber, 2000*).

THE AIM OF THE WORK

Owing to the spectacular progress and variations of recent investigating modalities and surgical techniques in management of the axilla in breast cancer patients we decided to clarify the problem putting subject again into view to demonstrate the most effective and the safest methods with least morbidity for managing patients with cancer.

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علاج الإبط في مرضى سرطان الثدي

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المقدمة

يعتبر سرطان الثدي من أكثر أنواع السرطان انتشاراً بين النساء وثاني أكثر سبب لوفاة بين النساء .

وتظل حالة العقد الليمفاوية تحت الإبط أهم مؤشر لتطور المرض ولها أهمية علاجية في مرضى سرطان الثدي .

ولكن التشخيص المبكر لسرطان الثدي كنتيجة لتطور وسائل الأشعة التشخيصية زاد من نسبة الأورام المكتشفة في المراحل الأولى قبل وصول المرض إلى العقد الليمفاوية .

كما أن تنظيف العقد الليمفاوية تحت الإبط قد يصاحب ببعض المضاعفات للذراع في هذه الحالات ومازالت الدراسات تجرى حول استحداث وسائل جديدة أقل تداخلية لتحديد حالة العقد الليمفاوية تحت الإبط في مرضى سرطان الثدي .

وقد أظهر فحص العقد الليمفاوية تحت الإبط بالموجات فوق الصوتية تحسناً في درجة التقييم قبل الجراحة لمرضى سرطان الثدي خاصة المقرر إجراء جراحات تحفيظة لهم .

ومن ناحية أخرى فقد تمت محاولة العديد من الطرق للحصول على عينات من العقد الليمفاوية لغرض التقييم الهستولوجي .

ونجد معظم الباحثين ينصحون بالمستوى الأول والثاني لتشريح الإبط والذي ينتج عنه عموماً إزالة عشرة أو أكثر من العقد الليمفاوية . وهو يوضح مرحلة المرض في 96% من الحالات المصابة بالمرض بدون تكون تورم ليمفاوي للذراع .

ولكن حديثاً أصبح الاستخدام الروتيني لتشريح تحت الإبط مثاراً للتساؤل. فقد أظهرت محاولات بحثية لدراسة عينة لأربع غدد لميفاوية فقط بعض النتائج المباشرة.

كما ظهرت مؤخراً طرق لفحص العقدة الليمفاوية الحارسة حيث يتم استكشاف وإزالة العقدة الأولى لتصريف منطقة الورم كبديل للتشريح الكامل لتحت الإبط. وعُرض في الدراسات الأخيرة أن هذا الأسلوب عملي وأمن ولكن له بعض المشاكل.

أما العلاج بالأشعاع كبديل للتنظيف الجراحي لتحت الإبط فقد يعطي نتائج شبيهة بتلك الناتجة عن التنظيف الجراحي ولكنها لا تعطي معلومات كافية عن حالة العقد الليمفاوية مقارنة بالجراحة.

الهدف من البحث

بسبب التقدم المدهش وتباين التقنيات الأخيرة في علاج الإبط في مرضى سرطان الثدي قررنا توضيح المشكلة وإعادة الموضوع ثانية إلى دائرة الضوء لعرض أكثر الطرق فاعلية واماناً وأقلها تعقيداً لحل هذه المشكلة.

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