



Breast Cancer Presenting as a Mass in the Axilla: A report of Two Cases

Cancer du sein présentant comme une masse dans l'Axilla: Un rapport de deux affaires

Michael Ohene-Yeboah

ABSTRACT

BACKGROUND: Breast cancer presenting initially as enlarged axillary lymph node is very unusual.

OBJECTIVE: To highlight the less frequent clinical presentation of breast cancer as persistent isolated, unilateral axillary lymphadenopathy.

METHODS: A report of two patients who presented with persistent axillary lymphadenopathy. Case one was a 65-year old woman who presented with an eight-month history of a painless mass in the right axilla. Clinical breast examination was normal. A mammogram was performed. The sub-clinical mass was excised using wire-guided localization providing a specimen for histology. A complete dissection of the right axilla was done and the specimen sent for histological examination. In a second case a 73-year old otherwise healthy woman reported for the assessment of two painful masses in the right axilla. Two hard ovoid masses 2.5 cmx3.5cm and 3.0cmx3.5cm were palpated in the right axilla. No other masses were palpable. Both breasts were normal on examination. Mammograms and chest X-rays were done. Fine needle aspiration cytology was done on both masses. A right sided complete axillary lymph node dissection was performed.

RESULTS: In case one, mammogram revealed a 5-mm sub mass in the right breast that was shown to be carcinoma. In case two the mammograms and chest X-rays were normal. Histologic examination of the surgical specimen from the axilla showed that four of the seven lymph nodes removed contained metastases.

CONCLUSION: Axillary nodal metastasis as the initial presentation of breast cancer in our women is no different from the presentation in women from other populations. *WAJM* 2007; 26(4): 319-322.

Keywords: Axillary lymphadenopathy, Breast cancer, mammography, Fine needle aspiration.

RESUME

HISTORIQUE: Le cancer du sein présentant d'abord comme élargie ganglionnaire axillaire est très inhabituel.

OBJECTIF: mettre en évidence les moins fréquentes présentation clinique du cancer du sein comme persistantes isolées, adénopathies axillaires unilatérale.

MÉTHODES: Un rapport de deux patients qui ont présenté des adénopathies axillaires avec persistance. Case était un 65 - année vieille femme ayant présenté une histoire de huit mois d'une masse indolore dans la bonne région axillaire. Un examen clinique des seins est normal. Une mammographie a été exécuté. Le sous-clinique de masse a été excisée en utilisant du fil à guidage localisation fournir un spécimen pour l'histologie. Une dissection de la région axillaire a été réalisé et l'échantillon envoyé pour examen histologique. Dans un deuxième cas de 73 ans, femme a signalé par ailleurs en bonne santé pour l'évaluation de deux douloureux masses dans la bonne région axillaire. Deux masses ovoïdes dur 2,5 cmx3.5cm et 3.0cmx3.5cm sont palpés dans la bonne région axillaire. Pas d'autres masses étaient palpables. Les deux seins étaient normales sur examen. Les mammographies et les radiographies pulmonaires ont été réalisées. Fine needle aspiration cytologie a été fait sur les deux masses. Un droit unilatéral complet ganglionnaire axillaire a été exécuté.

RÉSULTATS: Dans le cas où un, la mammographie a révélé à 5 mm sous la masse dans le sein droit qui a été montré à un carcinome. Dans le cas où deux, la mammographie et la radiographie pulmonaire étaient normaux. L'examen histologique de la pièce opératoire de la région axillaire révélé que quatre des sept ganglions retirés contenues métastases.

CONCLUSION: métastases ganglionnaires axillaire comme la présentation initiale du cancer du sein dans nos femmes n'est pas différente de la présentation des femmes en provenance d'autres populations. *WAJM* 2007; 26(4): 319-322.

Mots clés: ganglionnaire axillaire, cancer du sein, de mammographie, d'aspiration fine aiguille.

INTRODUCTION

World wide breast cancer is the most common cause of cancer deaths in middle aged women.¹ In developing countries, breast cancer is a leading cause of cancer related mortality due mainly to late presentation.² In Ghana breast cancer is increasingly diagnosed as breast disease awareness increases.^{3,4} Ultra-sonography and mammography services are not widely available in our hospitals. Careful clinical examination of patients and biopsy of suspicious lumps remains the mainstay of diagnosing breast cancer. The purpose of reporting these two cases is to highlight the less frequent clinical presentation of breast cancer as persistent isolated, unilateral axillary lymphadenopathy.

CASE REPORTS

Case 1

A 65-year-old postmenopausal woman visited our Breast Clinic (The KATH-BCC) for the assessment of a painless progressive mass in the right axilla. The axillary lump had been present for some eight months before the visit and had failed to respond to some previous injections and herbal treatment. Apart from a Caesarean Section the patient had some 40 years earlier there were no significant revelations in the rest of the clinical history. Physical examination revealed a healthy-looking woman. A mobile, ovoid, solid, firm and well-defined mass with a maximum diameter of 3.5cm was palpated in the right axilla. No other masses were palpated. No palpable abnormalities were detected in both breasts. Mammography of both breasts revealed a 5 mm sub-clinical mass lesion deep in the right breast (Fig. 1). It was classified as a BIRADS 5 lesion.⁵ Wire guided localization and wide local excision of the impalpable mass was performed. The histopathology was reported as a 6-mm invasive ductal carcinoma. A right sided complete axillary lymph node dissection was performed. Histological examination revealed that 3 of the 8 lymph nodes removed all contained metastases from a poorly differentiated adenocarcinoma. One of the metastatic lymph nodes measured 6cm. Post-operatively the patient was treated with whole breast radiotherapy. This was followed eight weeks later with

intravenous doses of Cyclophosphamide 1.5mg, Methotrexate 75mg, and Five-Fluro-Uracil 250mg on days one and eight of a 14 day cycle every month for six months.

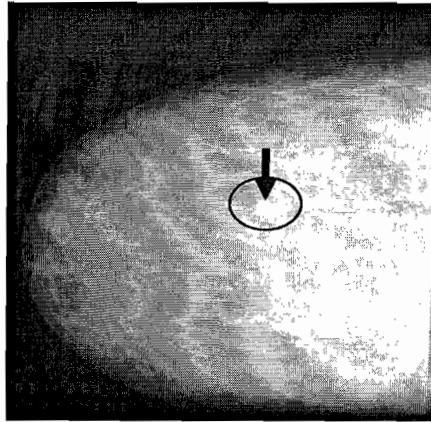


Fig. 1: Mammogram of right breast of case 1 showing a 5 mm mass (arrowed)

Case 2

A 71-year-old postmenopausal woman was seen at the KATH-BCC on account of painful masses noticed in the right axilla some six months earlier. She had no other complaints. The past medical history did not reveal any significant findings.

Physical examination revealed a healthy-looking woman. Two hard masses, ovoid in shape, 2.5cmx3.5cm and 3.0cmx3.5cm with limited mobility were palpable in the right axilla. No other masses were palpated. Both breasts were normal on examination. Mammogram of both breasts was reported as normal and a chest x-ray was normal. Fine needle aspiration cytology done on both masses revealed the presence of malignant cells. A right sided complete axillary lymph node dissection was performed. Histologic examination showed that of the seven lymph nodes removed and examined four contained metastases from a poorly differentiated adenocarcinoma. A repeat mammogram performed eight weeks after the initial presentation was reported as showing changes suggestive of mastitis carcinomatosis in the right breast. Postoperatively the patient was treated with whole breast radiotherapy. This was followed eight weeks later with intravenous doses of Cyclophosphamide 1.5g, Methotrexate 75 mg, and Five-Fluro-

Uracil 250 mg on days one and eight of a 14 day cycle every month for six months. Eight months after the diagnosis and treatment the patient was alive and well.

DISCUSSION

Malignant axillary lymphadenopathy as the initial presentation of breast cancer is very rare.⁶ The most common malignant cause of persistent axillary lymphadenopathy is a lymphoma.⁶ In a review of 72 patients who had excisional biopsy for unilateral axillary lymphadenopathy, 23% were malignant of which 13.9% were lymphomas and 9.7% metastatic carcinomas.⁷ In women the most common primary site is the breast.^{6,7} Breast cancer presenting with malignant axillary adenopathy accounts for 1-3 of every 1000 breast cancers diagnosed.^{8,9} It is regarded as a special presentation of breast cancer; the occult breast cancer (OBC).⁶ Previous published data indicate that OBC is more common in premenopausal women.¹⁰ In our cases the 2 women were both post menopausal.

Nearly a hundred years ago Halsted described three patients who had presented with axillary masses one to two years prior to a tumour becoming clinically evident in the breast.¹¹ Two years later Cameron¹² suggested that axillary masses in the female patient with no palpable mass in the breast most likely represented metastatic carcinoma arising from the breast and recommended ipsilateral mastectomy as the treatment for these patients.

Over the years the increasing availability and use of mammography and ultrasonography have significantly improved our ability to identify obscure, nonpalpable lesions in the breasts of patients with axillary masses.⁶ This was the case in case 1 where a nonpalpable lesion was found on mammography. Although other studies (ultrasound and MRI) may detect abnormal or suspicious lesions in the breast mammography is the most common imaging modality used for the detection and assessment of these sub-clinical lesions.^{5,6,13} In case 1, the lesion was characterized on mammography as BIRADS 5 with an 80% risk of cancer⁵ and this was confirmed by the subsequent histology report on the wire-guided localization excision biopsy

specimen.¹³

No study has reported the exact length of time between diagnosis of the axillary nodal metastasis and discovery of a primary in the breast since Halsted reported on his 3 cases.^{11,14} In our second case a period of 8 weeks separated diagnosis of the axillary nodal metastasis and discovery of a primary in the breast. This is a much shorter period than that reported by Halsted.¹¹

In a number of patients with OBC no breast lesion can be found after extensive clinical examination, ultrasonography and mammography.⁶ Reports by Lloyd,¹⁴ Schelfout et al,¹⁵ and Steunebrink et al¹⁶ all provide some evidence as to the usefulness of breast Magnetic Resonance Imaging (MRI) in the assessment of patients with axillary lymphadenopathy and normal breast on clinical examination with no abnormalities on mammographic and ultrasonographic examination. Not all MRI detected breast lesions may be carcinoma. An MRI compatible biopsy system is needed for complete diagnosis.¹⁷ In low income countries² with limited health care resources, MRI compatible biopsy systems may not be available limiting the capacity to completely manage these cases. It is suggested that physicians be aware of this form of presentation of breast cancer and refer these patients to the Teaching Hospital for complete assessment and treatment.

The best management options for OCB presenting as axillary metastases remains controversial.⁶ Available experience is based on a collection of several small retrospective studies and case reports.⁶ Conclusive treatment guidelines are still debatable. Total mastectomy and axillary dissection has been the accepted or traditional treatment for patients with occult primary breast cancer presenting with axillary lymphadenopathy.^{6,18} A previously sub clinical tumour is ultimately discovered in the surgical mastectomy specimen in 40-80% of the cases.^{6,17}

Published data over the past two decades has revealed a reduction in the proportion of tumours identified in the mastectomy specimen to below 40%.¹⁹ It is assumed that advances in breast imaging over the past 20 years may

account for the change.⁷ The increasing failure to identify any tumour in mastectomy specimens has led to a consideration of other treatment options such as, observation or observation with delayed mastectomy with a view to conserving the breast.¹⁰ However published series indicate that breast observation alone without irradiation has been associated with unacceptable rates of local failure. Many patients eventually manifest a tumour in the untreated breast over the period of observation. This latent period has been very variable with reported periods averaging 27 months and range of 11-47 months, and 13 months with a range of 2-34 months.^{6,19} Nearly two decades ago, Kemmeny²⁰ and colleagues recommended breast conservation as a viable treatment option for patients with occult breast cancer presenting with axillary metastases. In their series, patients were treated by axillary dissection followed by whole breast irradiation. Subsequently several reported series have confirmed that breast conservation with irradiation effectively reduced the local failure rate without affecting the prognosis.^{6,17-20} The 5-year survival of patients treated by breast conservation was not significantly different from the survival of patients treated by mastectomy.¹⁹⁻²⁰ Breast conservation consisting of axillary dissection and whole breast irradiation is now an accepted treatment of patients with occult cancer presenting with axillary metastases.⁶

Axillary lymph node presentation of breast cancer in Ghanaian women is no different from the presentations in women from other populations. Mastectomy and more recently breast conservation are both acceptable treatment modalities for patients with occult breast cancer presenting with axillary lymph node metastases.

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