

METASTATIC CARCINOMA OF THE BREAST WITH INGUINAL LYMPH NODE INVOLVEMENT: A REPORT OF TWO CASES

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ABSTRACT

Background: Metastatic carcinoma of the breast may display varied clinicopathological patterns. Lymphatic spread to the inguinal lymph nodes is, however, very rare.

Objective: To report two cases of advanced breast carcinoma with metastases to the inguinal lymph nodes in two Nigerian women.

Setting: The University of Port Harcourt Teaching Hospital, Port Harcourt, Nigeria.

Case Report: Two Nigerian women, one aged 40 years with an invasive lobular carcinoma of the right breast, and the other aged 48 years with an infiltrating ductal carcinoma of the left breast, presented with metastases to their corresponding inguinal lymph nodes diagnosed by open biopsy.

Results: The first had a right simple mastectomy done and was lost to follow up before any adjuvant therapy could be administered. The second died before any definitive treatment could be offered.

Conclusion: Metastasis to the inguinal nodes is rare and signifies an advanced disease. The pathogenesis is speculative, probably from retrograde embolisation.

Key Words: Breast carcinoma, metastases, inguinal lymph nodes

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INTRODUCTION

Carcinoma of the breast is a world wide surgical problem. In Nigeria carcinoma of the breast is the commonest malignancy in women¹. The sites of metastases from ductal and lobular carcinoma are somewhat different. While ductal carcinoma tends to spread to the liver, lungs and brain, lobular carcinoma spreads more to the gastrointestinal tract, female reproductive organs and peritoneum^{2,3,4}. The usual sites of nodal metastases are the axilla, infraclavicular and supraclavicular fossae, the mediastinum and the internal mammary chain. Metastasis to the inguinal lymph nodes is very rare. This is a report of two cases of advanced breast carcinoma in two Nigerian women with metastases to the inguinal lymph nodes.

Case 1

A 40- year- old woman presented to the orthopaedic unit of the University of Port Harcourt Teaching Hospital with waist pain of two years duration, inability to walk well of two months duration and a painful right groin swelling of two months duration. Physical examination revealed an ill-looking woman in painful distress and walking with a limp. There was a hard, fixed lump, 3cm in diameter in the left

Upper inner quadrant of the right breast. The axillary lymph nodes were not palpable. There was a tender, hard lymph node, 3cm in diameter in the right groin. Lumbosacral radiographs revealed osteophytes at L4. Her retroviral status was negative. An excision biopsy of the breast lump and the inguinal node was reported as invasive lobular carcinoma and metastatic carcinoma of the breast respectively. Mammography of the contralateral breast and abdominal ultrasonography revealed no abnormalities. She underwent a right simple mastectomy but adjuvant chemotherapy was delayed, as her haematological indices were rather low. She got lost to follow-up about two months later.

Case 2

A 48- year- old woman presented with a five- month history of painless left breast lump, a four-month history of painful left groin swelling, and a three-month history of left iliac fossa mass. The breast lump was in the upper inner quadrant and measured 10x12cm in size. It was hard and mobile. There was an associated hard, mobile left supraclavicular node measuring 3cm in diameter. The groin swelling was about 8x10cm in size, hard, fixed and exquisitely tender. The iliac fossa mass measured about 10cm in diameter; it was firm in consistency, tender and slightly mobile. A fine needle aspiration cytology of

the breast lump was reported negative for malignancy and so an excision biopsy was done. The report was that of infiltrating ductal carcinoma. An incisional biopsy of the groin swelling also revealed metastatic carcinoma of the breast. Ultrasonography of the abdomen suggested a left ovarian tumour with pelvic infiltrations. There was no functioning computerized tomography facility in our centre then. An exploratory laparotomy was being planned for her when she suddenly developed herpes zoster in the left side of the abdomen. She refused to give consent for retroviral screening. Her condition, however, soon started deteriorating as she developed abdominal distension with ascites and profuse diarrhoea. She died after about two months in the hospital.

DISCUSSION

Breast cancer can spread to virtually every organ in the body. Distant spread is usually by lymphatic or haematogenous routes. Transcoelomic spread with development of ascites and pelvic seedlings has also been described⁵. It is, however, very uncommon to find metastases to the inguinal lymph nodes. With the Halstedian theory of breast cancer spread by direct permeation to regional lymph nodes, it is difficult to explain the finding in the two patients presented. However, if as it is now believed, that spread is mainly by embolisation, this can probably be explained⁶. As Haagensen suggested, metastases via the rectus muscle most likely occur only when the internal mammary lymphatic trunk is blocked higher up in the upper intercostal spaces. When blockage occurs, the flow of lymph may be reversed and carcinomatous emboli from the breast may reach unusual sites⁷.

Management of the contralateral breast in patients with lobular carcinoma is controversial with some authors advising routine biopsy of a normal contralateral breast while others recommend a contralateral prophylactic mastectomy. Most of these lesions can be detected by physical examination and mammography. If the breast is found to be normal Fisher and associates believe that there is no indication for excision of the contralateral breast on the basis of a diagnosis of lobular carcinoma^{8,9}. This was our line of management.

There is paucity in the literature of inguinal lymph node metastasis from breast cancer. However, Baba M¹⁰ and associates reported a case of solid tubular breast carcinoma diagnosed by inguinal lymph node biopsy. The nodal swelling was observed twelve months before a T1 tumour was found in the right breast.

There are many reports dealing with ovarian metastases derived from breast carcinoma^{11,12}. This was suggested in the ultrasound report of the second

patient above. Studies also revealed that women who inherit mutations in BRCA1 or BRCA2 genes have a greatly elevated risk of ovarian cancer^{13,14}. The planned but aborted exploratory laparotomy in the second patient presented would probably have thrown more light, whether it was a concurrent primary ovarian cancer or an ovarian metastasis from breast cancer.

The rapid progression of illness in the second patient and the appearance of herpes zoster, ascites and profuse diarrhoea also suggest that she was an immunocompromised patient. Unfortunately, she refused to consent to retrovirus screening.

CONCLUSION

The marked variability in the biologic behaviour and clinical course of breast cancer is well known but metastasis to the inguinal lymph nodes is very rare. The pathogenesis is a speculation, probably from retrograde embolisation.

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