

## ISOLATED AXILLARY METASTASIS IN A OCCULT BREAST CANCER: A RARE CASE REPORT

Pal Naresh<sup>1</sup>, Griwan MS<sup>2</sup>, Kumar Ritesh<sup>3</sup> and Bhardwaj Mohit<sup>4</sup>

Department of Surgery, Pt B.D. Sharma, PGIMS Rohtak

\*Author for Correspondence: [nareshpalsinghdr@gmail.com](mailto:nareshpalsinghdr@gmail.com)

### ABSTRACT

Metastasis to Axillary lymph node (ALN) from an occult breast cancer is a rare entity and it can be a diagnostic and therapeutic challenge. After ruling out the other sites of malignancy by metastatic workup, mastectomy and axillary clearance should be done in all patients. After standard surgical cure patient should be subjected to chemo-radiotherapy. We reported a case of 56 year old female presented with left axillary mass hard in consistency with no lump palpable in breast and opposite axilla breast. USG, Mammogram and MRI were not able to rule out primary source. FNAC reported it as metastatic carcinoma i.e. poorly differentiated adenocarcinoma. Patient was further managed with Modified radical mastectomy and biopsy showing it as metastatic carcinoma breast. So all isolated ALN metastasis should be considered as occult primary breast cancer unless otherwise proved.

**Keywords:** Occult Breast Cancer, Axillary Nodal Metastasis, Mastectomy, Radiotherapy.

### INTRODUCTION

Occult carcinoma breast is a rare entity which accounts for less than 1% of all patients of breast cancer (Owen *et al.*, 1954). The secondaries from the sites like lung, thyroid, gastrointestinal tract, ovary, melanoma etc. may occasionally metastasized to axilla, however, the most common site of primary cancer in such cases is the ipsilateral breast unless otherwise proved (Feuerman *et al.*, 1962; and Copeland and McBride, 1973).

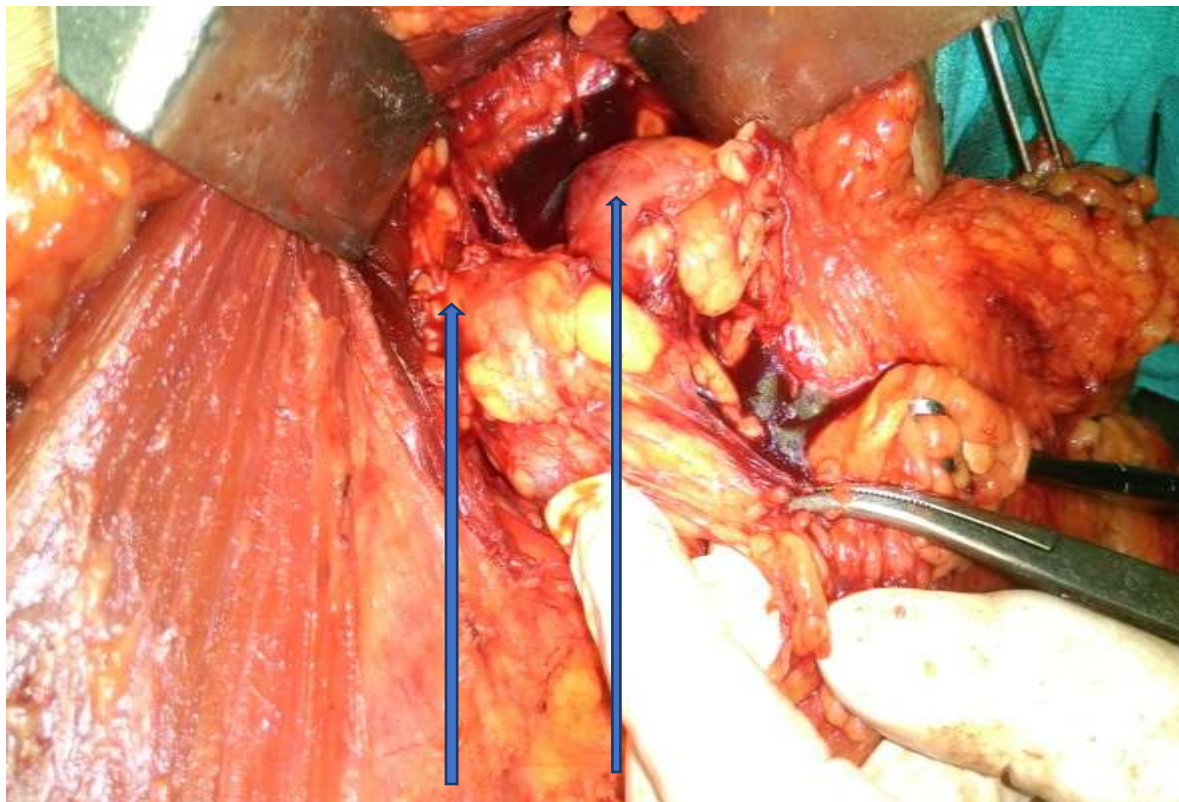
Diagnosis and treatment in these patients remain very challenging. Due to its rare occurrence and therapeutic dilemma, we decided to report our case who presented with a left axillary mass without any evidence of primary malignancy in bilateral breasts. An effort has been made to review the literatures for complete management in such patients.

### CASE

56 year female patient presented in our outdoor with complaint of swelling in left axilla for three months. There was no history of weight loss, nipple discharge and lump in bilateral breasts. There was no family history of breast cancer. Patient was previously operated for hysterectomy 8 year back for some benign disease however documents were not available. On examination of B/L breast and right axilla were normal. In left axilla there was single, mobile, palpable swelling, hard in consistency, around 2 x 2.5 cm size present in anterior part of axilla. There was no lump in bilateral breast, no hepato-splenomegaly or any bony tenderness. Patient was diagnosed as a case of unknown primary and further evaluated. Ultrasound breast and axilla reveals breast as normal and a single lymph node in axilla of around 2.5x2 cm. Mammogram breast was advised and suspicious area of calcification was depicted in left breast and a single rounded Lymph node in axilla. Fine needle aspirate from the left axillary swelling shows, poorly differentiated adenocarcinoma. MRI breast reported a parenchymal heterogeneity in left retro areolar area with few suboptimal enhancing lesion in lower inner quadrant suggestive of indeterminate carcinoma breast with multiple axillary lymph nodes. Patient was planned for Modified radical mastectomy. Operative finding as shown in figure 1 revealed 3 lymph node of size 2 x 2, 2x2.5 and 1x2 cm with other small size lymph node. Level 1 and II lymph node dissection done and whole specimen sent for histopathological examination. The report of pathology shows 20 out of 21 lymph node positive for metastatic breast carcinoma and no lesion was found in breast parenchyma. Patient was doing well with

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no intraoperative or postoperative complication and further referred to department of radiotherapy for further chemoradiation management.



**Figure 1: Intraoperative photo: Arrows showing metastatic lymph nodes in left axilla**

### DISCUSSION

The female patients who have adenocarcinoma in axillary lymph nodes as the sole clinical site of cancer can be a diagnostic and therapeutic challenge for surgeons. Halsted, in 1907, first described two patients with ‘extensive carcinomatous involvement of the axilla’ due to occult breast cancer. Within few months, the mammary disease manifested itself in both patients. Occult carcinoma breast presenting with axillary metastasis as a first sign is rare among breast cancers patients (Lloyd and Nash (2001). However, for all practical purpose in case of isolated axillary metastasis, occult breast cancer should be the most pertinent differential diagnoses in absence of any other primary site of malignancy after initial diagnostic workup. Feuerman in his study stated that once carcinoma reaches the axillary lymph nodes from an extramammary source, the primary lesion is no longer “occult” it will be definitely detectable by initial diagnostic workup (Feuerman *et al.* 1962). The actual incidence of occult breast cancer is not known but a study done by Owen *et. al.*, (1954) in their study<sup>1</sup> stated the incidence as 0.3% and Pantheroudakis *et al.*, (2010) as 0.12 to 0.67%. A thorough clinical examination, FNAC of the axillary lymph node, Chest X-ray, ultrasound of the abdomen, screening, mammogram and /or Magnetic resonance imaging (MRI) of the breast are sufficient as the recommended investigations for locating potential sites of primary carcinoma. MRI of the breasts was highly sensitive (Pantheroudakis *et al.*, 2010) (59%) in detecting occult primary lesion in breasts and MRI increased the rate of breast conservation surgery. Hence, MRI should be the recommended imaging for breast in such cases (Pantheroudakis *et al.*, 2010).

Regarding management level I and II with or without level III Axillary lymph nodes dissection is a standard practice and radiotherapy must be advised accordingly. Feigenberg *et.al.*, (1976) reported 50% recurrence rate when the axilla is treated only with radiotherapy (RT) in comparison to axillary dissection

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(followed by RT to axilla also showed higher recurrence (20-50%) as well. Treatment of the ipsilateral breast in patient with occult primary and axillary lymph node metastasis remains controversial (Pantheroudakis *et al.*, 2010). The standard approach in several series was 'blind' modified radical mastectomy (MRM) (Feuerman *et al.* 1962; Halsted (1907); Pantheroudakis *et al.*, 2010) at the time of axillary clearance.

Earlier few authors (Ellerbroek *et al.* 1990; Merson (1992) tried conservative management (observation only) of the breast after treating the axilla; but after analysing their results it was seen that 5 year disease free survival is significantly better in the patient treated with mastectomy along with axillary treatment (83%) than in patient with conservative management to the breast after treating axilla only (43%).

### CONCLUSION

All isolated ALN metastasis should be considered as occult primary breast cancer unless proved otherwise. MRI breast, FNAC of axillary mass along with other metastatic workup should be carried out in all patients of axillary mass. Axillary dissection with mastectomy should be followed by appropriate adjuvant chemo-radiotherapy.

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