



**ORIGINAL RESEARCH PAPER**

**General Surgery**

**AXILLARY LYMPH NODE SAMPLING AS AN INDICATOR OF METASTATIC STATUS OF LYMPH NODE IN AXILLA IN BREAST CARCINOMA.**

**KEY WORDS:** axillary sampling, sentinel lymph node biopsy.

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**ABSTRACT**

**Aim** To identify the accuracy of sampling Axillary lymph node in predicting their involvement in Breast Cancer.  
**METHODS** low axillary sampling is done by 3-4cm axillary incision in middle third of standard axillary clearance incision in breast conservation surgery and through lateral part of upper flap incision in MRM by using descriptive study in 30 patient.  
**RESULTS:** Out of 30 cases 25 patient had negative sampling report and 4 with 1 lymph node positive and 2 with 2 lymph node positive .The p value was not statistically significant.  
**CONCLUSION :** The axillary sampling could not be used as an alternative procedure for the sentinel lymph node biopsy , because it has high False negative rate thus showing that low axillary sampling of 4 lymph nodes in axilla is not a good indicator of metastatic status of entire lymph nodes in axilla

**INTRODUCTION:**

It is most common cancer in urban areas in India. It is 2<sup>nd</sup> most common cancer in rural areas. women. 1/8 women have chance of developing breast cancer in life time. In India, incidence of breast cancer is less than US, 1 in 30 yrs. Management of breast cancer includes Surgery, Reconstruction, Adjuvant treatment, CT, RT, HT, Targeted Therapy. **Sentinel lymph node biopsy** has been incorporated into standard guidelines as an appropriate initial alternative to routine staging axillary lymph node dissection (ALND) for patient with early stage breast cancer with clinically negative axillary lymph nodes<sup>2</sup>.

The early validation of SNB procedure has been based on multiple small studies with variable identification rates, accuracy & false negative rates<sup>4</sup>. However high cost of Gamma probe and need for radio-colloid have limited its widespread acceptance in developing countries.

Many centres in UK,<sup>5,6</sup> and Japan have tested & adapted, as an alternative to targeted Sentinel node biopsy, 4 node axillary sampling as standard procedure for axillary prediction in clinically node negative operable breast cancer.

The anatomically defined, low axillary sampling ensure the procedure is less subjective more standardized & uniform with low inter-observer variability.<sup>8,9</sup> Low axillary sampling will be performed in this thesis work for predicting axillary nodal metastasis in operable breast cancer by completing ALND in all cases.

The main disadvantage of axillary clearance is the potential morbidity such as lymphoedema, pain, stiffness and shoulder weakness.

The axillary lymph node status is still the most important single prognostic factor in breast cancer. Clinical examination<sup>10</sup> and the use of imaging techniques<sup>11-13</sup> to assess the node status are not reliable enough procedures because of the high rates of false positive and false negative results. Histopathological assessment has rather been considered the gold standard for the evaluation of lymph nodes. However, there are numerous ways to assess the axillary lymph nodes, depending on the surgical procedure performed and the histopathological tools used. Complete axillary dissection and the routine histopathological work up of a minimum of 10 to 11 nodes was once the standard staging and therapeutic procedure, but several alternative ways have been studied to reduce possible complications of the dissection and to spare the increasing proportion of patients without axillary metastases.

**MATERIALS & METHODS**

The study is to be conducted in Department of Onco-Surgery, Batra Hospital, New Delhi. The study will include total of **30** patients presenting to Onco-Surgery OPD of BHMRC with Breast

Cancer with clinically impalpable lymph nodes. This study was done from April 2012 to June 2014.

**INCLUSION CRITERIA FOR SUBJECTS WILL BE**

- 1. All female patient with proven Breast Cancer with impalpable or clinically node negative axilla.

**EXCLUSION CRITERIA FOR SUBJECTS WILL BE**

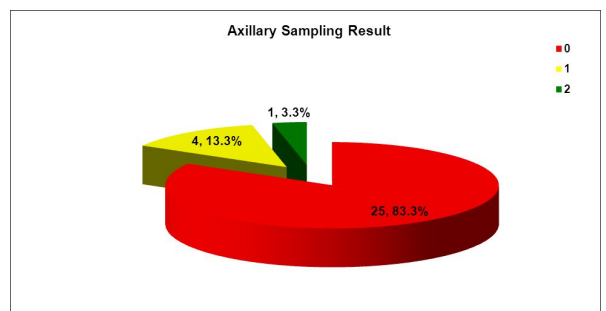
- 1. All patient with proven Breast Cancer with one or more than one palpable axillary lymph node .
- 2. All patient with prior axillary lymph node biopsy.

**RESULTS**

Axillary Sampling Result	Frequency	%
0	25	83.3%
1	4	13.3%
2	1	3.3%
Total	30	100%

Axillary Sampling Result	Primary Side		P value
	Left side	Right Side	
0	12 (75%)	13 (92.9%)	0.384
1	3 (18.8%)	1 (7.1%)	
2	1 (6.2%)	0 (0%)	
Total	16 (100%)	14 (100%)	

Axillary Sampling Result	Site					P value
	LIQ	LOQ	LUO	UIQ	UOQ	
0	9 (90%)	4 (80%)	1 (100%)	2 (66.7%)	9 (81.8%)	0.766
1	0 (0%)	1 (20%)	0 (0%)	1 (33.3%)	2 (18.2%)	
2	1 (10%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
Total	10 (100%)	5 (100%)	1 (100%)	3 (100%)	11 (100%)	



**DISCUSSION**

We have done extensive study on the axillary sampling work taking in account 30 pt. Admitted to our hospital, and have properly monitored for the inclusion and the exclusion criteria. The study concluded that the axillary sampling could not be used as an alternative procedure for the sentinel lymph node biopsy, because it has high False negative rate thus showing that low axillary sampling of 4 lymph nodes in axilla is not a good indicator of metastatic status of entire lymph nodes in axilla and the 4 node low axillary sampling cannot replace the sentinel lymph node biopsy procedure.

**CONCLUSION**

1. Study concluded that breast cancer risk increases with age, with mean age of approximately 51.
2. The duration of symptoms at which patients presented mostly was 3-12 months.
3. Most of the females diagnosed with carcinoma breast were postmenopausal 70%.
4. Upper outer quadrant was more frequently involved.
5. Mean size at which patients presented was about 5 cm.
6. p value or the probability of type 1 or false positive error was high.
7. 4 node low axillary sampling is not the representative of entire axilla.
8. Axillary sampling is not a good indicator of status of lymph node in metastatic breast cancer thus could not replace the sentinel lymph node biopsy procedure.

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