

THE IMPACT OF AXILLARY LYMPH NODE CORTICAL THICKNESS ON PREDICTING AXILLARY NODAL METASTASIS IN BREAST CANCER

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INTRODUCTION

- ❖ Breast cancer is the commonest cancer amongst women and numerous factors can affect prognosis
- ❖ Axillary lymph node (ALN) status is an important prognostic factor in breast cancer as it has the greatest influence on long-term survival and is crucial in treatment decisions
- ❖ Axillary ultrasound (AUS) in correlation with FNA/Core biopsy where necessary is an integral part of the triple assessment in ladies diagnosed with breast cancer and aids pre-operative evaluation of ALN status
- ❖ Individuals without suspicious ALNs undergo sentinel lymph node biopsy (SLNB) whereas, positive ALNs proceed to axillary lymph node clearance (ALNC)
- ❖ Previously, ALN status was obtained via complete ALNC, which is associated with significant morbidity, such as lymphoedema, pain and paraesthesia
- ❖ The development of the SLNB in the 1990s has radically changed axillary management leading to less morbidity

AIMS

- ❖ To determine ALN cortical thickness cut-off that is predictive of nodal disease
- ❖ To determine if the number of abnormal ALNs on AUS is predictive of number of positive ALNs at histology
- ❖ To identify patients with low volume disease who may be offered SLNB over ALNC

METHODS

- ❖ Between October 2017 and May 2018 preoperative AUS was performed in 217 patients scheduled for surgery
- ❖ Cortical thickness and number of nodes established via AUS and compared with histology

RESULTS

- ❖ 217 AUS were performed, 71% normal, 21% equivocal and 8% had an abnormal AUS

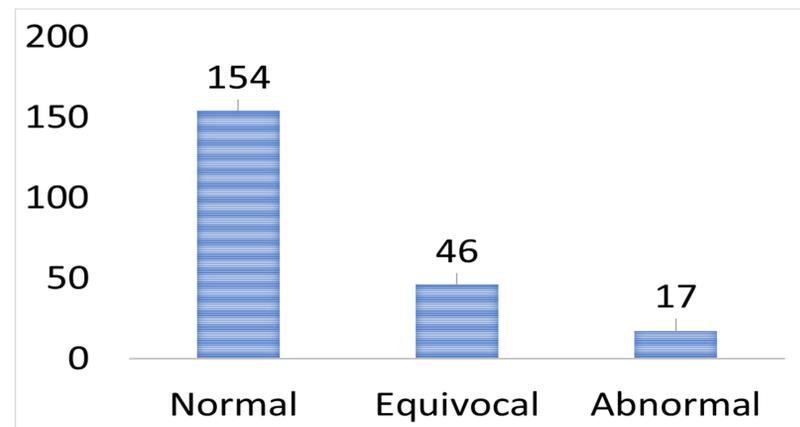


Figure 1. A Bar Chart to show the number of axillary ultrasound scans being performed

- ❖ 19% of normal AUS had false negative result. 63/217 underwent nodal FNA. 23/63 had nodal metastases whereas 40/63 did not
- ❖ However, 7/40 had false negative FNA results compared to histology
- ❖ ALN cortical thickness cut-off of 2 mm, 63 ladies underwent FNA with 23 proceeding with ALNC
- ❖ Increasing cut-off to 4mm, 20 ALNs underwent FNA with 14 ALNCs. However, 4 patients would have needed an ALNC following SLNB as ≥ 7 metastatic ALNs
- ❖ Lastly, 5mm cortical thickness cut-off, 16 ALN FNAs performed and 13 ALNCs
- ❖ 14/23 had one abnormal ALN while 9/23 had multiple abnormal ALNs on AUS
- ❖ 74% had ≤ 4 metastatic ALNs at histology after ALNC

CONCLUSION

- ❖ By increasing cortical thickness threshold from 2mm to 5mm, we would reduce number of patients undergoing unnecessary FNAs and avoid overtreating by upfront ALNC
- ❖ Thereby, reducing the incidence of morbidity and complications such as lymphoedema, pain and paraesthesia

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