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**ORIGINAL ARTICLE**

## Axillary Dissection Per Se for Surgical Management of Occult Breast Cancer: Is It Enough?

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### ABSTRACT

**Background:** Occult breast cancer (OBC) is an uncommon presentation of a common disease. Occult breast cancer provokes a considerable debate regarding the mere benefit of axillary dissection alone versus modified radical mastectomy (MRM). This work aimed to evaluate the oncological safety and patient satisfaction with axillary dissection in the surgical management of Occult breast cancer (OBC).

**Methods:** Thirty-two patients with Occult breast cancer (OBC) were included in the current study during the period between April 2013 and January 2022. After exclusion of the presence of any small breast tumour, all our patients underwent axillary clearance followed by whole breast irradiation.

**Results:** In the present study, there was no recurrence in the breast encountered during the period of follow up which ranged from 1.5 to 8 years.

**Conclusions:** Axillary dissection is oncological safe as surgical management for occult breast cancer patients and provides more satisfaction and psychological effect on Occult breast cancer (OBC) patients.

**Keywords:** Occult breast cancer; Occult cancer; Axillary lymphadenopathy



### INTRODUCTION

Breast cancer was considered the commonest malignancy among females [1]. Occult breast cancer (OBC) is an uncommon presentation of a common disease [2]. OBC was first described by Halsted in 1907, it represents about 0.3-1% of breast cancer [3-8].

Occult breast cancer provokes a considerable debate regarding the mere benefit of axillary dissection alone versus modified radical mastectomy (MRM), so, in this work, we try to assess axillary clearance alone for surgical management of OBC. The aim of this work was to evaluate oncological safety and patient satisfaction with axillary dissection in the surgical management of OBC.

### METHODS

This prospective study was done at the surgical oncology unit, General surgery department, Zagazig University, Egypt. Thirty-two patients were included in the study during the period between April 2013 and January 2022. Our work was approved by the local ethical committee and

informed consent was obtained from all patients included in the study.

All patients with OBC were included in this study. Our exclusion criteria included patients with contralateral breast cancer and patient with other malignancies rather than the axilla.

All the patients were counselled and written informed consent was obtained from all of them regarding the manoeuvre and the expected complications.

The study was approved by the research ethics committee of the Faculty of Medicine, Zagazig University. The study was done according to The Code of Ethics of the World Medical Association (Declaration of Helsinki) for studies involving humans.

General examination of patients showed only unilateral axillary lymphadenopathy. Breast ultrasonography and mammography were done for all cases showing axillary lymphadenopathy with no masses in the breast. CBC, ESR, LDH and CRP were prescribed for the exclusion of lymphoma. True cut biopsy and hormonal receptor (ER-PR-HER2) were prescribed for

diagnosis of OBC. MRI was prescribed for all patients to exclude the presence of any small breast tumours. After routine preoperative investigations, all our patients underwent axillary clearance followed by whole breast irradiation.

Our patients were followed up (for the purpose of detecting breast tumour recurrence) every month for 3 months, every 3 months for 1 year, then every 6 months for 2 years then every year. Follow-up was done by clinical examination, breast ultrasonography and MRI if there is any abnormality detected in the ultrasonography. At the end of the follow-up period, MRI was done for all patients to exclude any breast lesions. The follow-up period ranged from 1.5 to 8 years.

**Statistical analysis:**

All patients’ data were collected, checked, and analysed by using (SPSS version 20). Data were

expressed as numbers with (%) according to the type of variable.

**RESULTS**

Thirty-two patients were included in the study, their ages ranged from 35 to 62 with a median age of 53 years. HER2 enriched type was the commonest biological type as 75% were HER2 positive. Demographic and clinic-pathological data were enumerated in **Table 1**.

75% of our patients were satisfied with the procedure; most of the unsatisfied patients were afraid of recurrence. Patient satisfaction and fear of recurrence were enumerated in **Table 2**.

In the present study, there was no recurrence in the breast encountered during the period of follow up which ranged from 1.5 to 8 years.

**Table 1:** Demographic and clinicopathological data.

Variables	Number (Percent)
<u>No. of patients</u>	32
<u>Age</u>	
Range	35-62
Median	53
<u>Hormonal receptors</u>	
<u>ER</u>	
ER +ve	11 (34.37)
ER –ve	21 (65.62)
<u>PR</u>	
PR +ve	9 (28.12)
PR–ve	23 (71.87)
<u>HER2</u>	
HER2+ve	24 (75)
HER2–ve	8 (25)
<u>No. of positive lymph nodes</u>	
<4	5 (15.62)
4-9	12 (33.5)
>9	15 (46.87)

**Table 2:** Patient satisfaction and Fear of recurrence.

Variables	Number (percent)
<u>Patient satisfaction:</u>	
Satisfied	24 (75)
Unsatisfied	8 (25)
<u>Fear from recurrence</u>	
Fear	7 (21.87)
Unfear	25 (78.12)

**DISCUSSION**

The patients represented with OBC should be carefully examined and investigated to exclude other causes of axillary lymphadenopathy and establish the diagnosis of OBC.

The surgical management of OBC is still controversial [4], OBC was classically treated by MRM when described by Halsted in 1907[9]. Other surgical options included blind excision of the upper outer quadrant with axillary dissection

which was initially proposed by Feigenberg in 1976 [10]. The concept of radiation therapy for the breast was introduced by Campana et al in 1989 [11]. Another solution was axillary dissection with the observation of the breast which was described by Vanooijen in 1993 [12].

In the current study, we tried to evaluate the oncological safety of axillary dissection alone with post-operative whole breast irradiation and its psychological effect on our patients.

One of the limitations of our study is the small number of patients but this is because this category is a rare type of breast cancer.

In the present study, there was no recurrence in the breast encountered during the period of follow-up; this means that there is no difference between MRM and axillary dissection with whole breast irradiation in the recurrence rate. The same results were reported by Medina-Franco et al, and Vlastos et al; that there was no statistically significant difference in locoregional recurrence [13-14]; while Blanchard et al reported that MRM has a lower recurrence rate [15]. 75% of our patients were satisfied with the procedure due to the preservation of the breast; most of the unsatisfied patients were afraid of the possibility of locoregional recurrence.

### CONCLUSION

Axillary dissection is oncological safe as a surgical management for occult breast cancer and provides more satisfaction and psychological effect on OBC patients.

We recommend a study including a large number of patients to understand the biological behaviour of this uncommon type, in order to decide standard strategies for the management of OBC.

**Conflict of Interest:** None.

**Financial Disclosures:** None.

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