## Occult Breast Cancer: Is it Time to Minimize Surgical Intervention?

Ignatiadou EV

Occult breast cancer (OBC) is a rather rare entity in clinical practice, presenting as axillary metastasis with no obvious breast lesion being identified on intensive clinical and imaging studies. Currently there is no consensus on the optimal treatment of this condition, and it is unrealistic to expect a high standard prospective randomized clinical trial to provide evidence-based guidelines.

Once the diagnosis is confirmed, treatment should be directed both to the affected axilla and the ipsilateral breast [1]. A broad spectrum of treatment choices has been proposed, ranging from surveillance only to total modified mastectomy with radiotherapy and adjuvant or neoadjuvant systemic therapy [2]. Worldwide, surgical treatment continues to be the preferred treatment for OBC, with total mastectomy being the most commonly adopted treatment [3,4]. Observational studies suggest that whole breast radiotherapy (WBRT) is a reasonable and safe alternative, perhaps even offering a better prognosis for the treatment of OBC [5]. The management of the axilla is more controversial. The standard of care is axillary lymph node dissection (ALND), which provides detailed information on the number of involved nodes, accurate tumor staging and analysis of the expression of various receptors [6]. In the era of personalized treatment strategies, it is reasonable to consider a more minimal surgical approach for the management of the involved axilla, such as sentinel lymph node biopsy (SLNB) and excision of the marked metastatic node after neoadjuvant treatment. Nevertheless certain important aspects should be seriously considered:

- 1. Currently there are no data to adequately support the safety of limited axillary dissection for OBC
- 2. The number of metastatic axillary nodes is a significant factor in the prognosis.
- 3. High quality performance of SLNB is essential if the method is to be applied, with the excision of 3 sentinel nodes being the minimum accepted number of nodes excised, along with the previously marked metastatic node(s).
- 4. Whole axillary radiotherapy appears, without question,

to reduce the incidence of local axillary recurrence. The supraclavicular lymph nodes should be included in the treatment field.

In this issue there is a very interesting report by Douvetzemis [7] which proposes an evidence-based methodology for approaching the diagnosis and treatment of OBC.

It is our opinion, and our strong recommendation, that this kind of management should be undertaken only within well-established institutional treatment protocols and in well organized multidisciplinary breast units. We strongly recommend the establishment of online registries for patients with OBC, in order to build a universal consensus on the optimal diagnostic and treatment strategies for OBC.

## References

- 1. Ellerbroek MD, et al. Treatment of patients with isolated axillary nodal metastases from an occult primary carcinoma consistent with breast origin. Cancer 1990;66:1461-7.
- Foroudi F, Tiver KW. Occult breast carcinoma presenting as axillary metastases. Int J Radiat Oncol Biol Phys 2000;47:143-7.
- Walker GV, Smith GL, Perkins GH, et al. Population-based analysis of occult primary breast cancer with axillary lymph node metastasis. Cancer 2010;116:4000-6.
- Sohn G, Son BH, Lee SJ, et al. Treatment and survival of patients with occult breast cancer with axillary lymph node metastasis: A nationwide retrospective study. J Surg Oncol 2014;110:270-4.
- 5. Vlastos G, Jean ME, Mirza AN, et al. Feasibility of breast preservation in the treatment of occult primary carcinoma presenting with axillary metastases. Ann Surg Oncol 2001;8:425-31.
- Hessler LK, Molitoris JK, Rosenblatt PY, et al. Factors Influencing Management and Outcome in Patients with Occult Breast Cancer with Axillary Lymph Node Involvement: Analysis of the National Cancer Database. Ann Surg Oncol 2017;24:2907-14.
- Douvetzemis SE. Management of occult breast cancerwith axillary involvement. Hellenic J Surg 2018;90:33-5.

Ignatiadou EV, MD, FACS, FEBS (Breast) Breast Unit, Piraeus Cancer Hospital "Metaxa" Corresponding author: Ignatiadou V Eleftheria, MD, FACS, FEBS (Breast) Breast Unit, Piraeus Cancer Hospital "Metaxa" e-mail: eliaign@yahoo.gr