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ASO Author Reflections: Metaplastic Breast Cancer-The Case for Doing Less and More.

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Past:

Metaplastic breast cancer (MBC) is a rare, sarcomatoid variant characterized by hematogenous spread and poor outcomes. MBC is frequently triple-negative, but contrary to the oft-cited triple-negative paradox, MBC has historically been viewed as chemoresistant, with patients often experiencing progression during treatment or early relapse soon afterwards. More recently, the heterogeneity of MBC as a clinical entity has been recognized;¹ in particular, HER2/neu expression in select cases of MBC has provided an opportunity for this subset of patients to have a good and potentially sustained response to systemic therapy.² Nonetheless, a diagnosis of MBC still portends a poor prognosis, and practice patterns remain inconsistent, with no evidence-based, society-endorsed guidelines for MBC-specific treatment.

Present:

Our paper, “Metaplastic breast cancer treatment and outcomes in 2,500 patients: a retrospective analysis of a national oncology database,” is the largest population-based analysis of MBC to include complete estrogen receptor (ER), progesterone receptor (PR), and HER2 status information for the entire cohort.³ We demonstrated that, despite previous concerns of inefficacy, receipt of chemotherapy was associated with improved overall survival as was receipt of radiation. However, in the same regression analysis, axillary lymph node dissection (ALND) was associated with worse overall survival, even with adjustment for pathological N stage. Furthermore, when compared to breast cancer patients who did not have MBC, patients with MBC were nearly twice as likely to have negative ALNDs, that is, pN0 disease on pathological review. Given our finding that ALND not only provided no survival benefit to MBC patients but was also potentially unnecessary in 20% of those who received it, we advocate judicious surgical decision making regarding management of the axilla in MBC patients.

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Conflicts of Interest to Disclose: None

Future:

In summary, MBC patients need more of some treatments and less of others: specifically, a multimodal approach including systemic therapy should be pursued, but ALND should not be universally performed. Anti-HER2 targeted therapy provides a lifeline for HER2+ MBC patients and foreshadows what future success *could* look like for HER2- MBC patients if similarly efficacious therapies were developed. ERBB4, PIK3CA, and FLT3 are frequently mutated in MBC tumors, and all 3 have targeted therapies that could potentially be used to treat MBC.⁴ On the other hand, our collective approach to the axilla would likely benefit from de-escalation: MBC is not universally associated with lymph node involvement, and patients with the disease should not be subjected to de facto ALND. Both axillary ultrasound with fine-needle aspiration and sentinel lymph node biopsy can provide accurate, minimally invasive axillary staging in MBC,⁵ and these procedures should be embraced as an alternative to performing ALND in MBC patients with no evidence of axillary metastases.

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