

breast cancer, early stage

274P **PERITUMORAL LYMPHOVASCULAR INVASION IMPACTS THE INCIDENCE OF SENTINEL LYMPH NODE (SLN) METASTASIS IN EARLY BREAST CANCER PATIENTS (PTS) WITH FAVORABLE PROGNOSTIC FEATURES: A RETROSPECTIVE STUDY ON 345 CASES**

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Aim: SLN biopsy (SLNB) has been recognized as a standard procedure for women with early breast cancer. Recently some studies reported the futility of axillary lymph node dissection in pts who are SLN positive but bear favorable clinical and primary tumor biological characteristics. Since we believe that SLNB could be avoided in specific subgroup of pts, we designed this study in order to identify key primary tumor characteristics and pts' clinical features that could influence the indication to perform SLN biopsy.

Methods: Retrospective analysis was carried out in women who had undergone surgery and SLNB for early breast cancer (pT1-2) from 2005 to 2013 at the Fatebenefratelli e Oftalmico Hospital in Milan. The association between SLN positivity and age, menopausal status, tumor size, histological grading, presence of extensive "in situ" components and lymphovascular invasion, quantitative evaluation of Ki-67, oestrogen and progesterone receptors, HER2 expression was assessed by means of univariate and multivariate logistic models.

Results: The records of 345 pts with early breast cancer who underwent surgery were retrieved. Mean age was 61 years and 79% pts were postmenopausal. 85% were treated with quadrantectomy and 66% had only one SLN removed. SLN metastasis was detected in 24% of cases. Tumor size was <2 cm in 76% of pts, and 86% were of luminal subtypes. Peritumoral lymphovascular invasion was detected in 32% of cases. At univariate analysis a statistically significant association was found between tumor size [odds ratio (OR) 1.05, confidence interval at 95% (95%CI) 1.01-1.08; p = 0.005], histological grade (OR 1.50, 95%CI 1.04-2.16; p = 0.029), presence of lymphovascular invasion (OR 3.81, 95%CI 2.27-6.37; p < .0001). At multivariate analysis, only lymphovascular invasion confirmed an association with SNL positivity (OR 3.26, 95% CI 1.89-5.64; p < .0001).

Conclusions: Our data suggest that in a population with favourable early breast cancer (luminal subtype, postmenopausal status and small tumour size) lymphovascular invasion is associated with a higher risk of SLN metastasis.

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