P109 IMPACT OF CLINICAL AND PATHOLOGIC FACTORS ON RECURRENCE OF NODE-NEGATIVE EARLY BREAST CANCER

Poster Abstracts I

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Goals: Patients with node-negative early breast cancer usually have good prognosis but tumor recurrence is still the problem compromising the survival. In this study, we seek to identify clinical and pathologic risk factors to predict recurrence and study the impact of adjuvant therapy on the risk factors.

Methods: A total of 716 patients who were diagnosed as pT1–2N0M0 breast cancer between 2005 and 2010 were retrospectively analyzed. Kaplan–Meier analysis was use to calculate the recurrence-free survival (RFS) and Cox proportional hazards regression analysis was used to estimate the hazards ratios (HR) of RFS and corresponding 95% confidence interval (CI) for various characteristics.

Results: Forty-two of 716 patients developed tumor recurrence during the 47.0 months of median follow-up. Kaplan–Meier analyses estimated that patients with the large tumor size, presence of lymphovascular invasion (LVI), Nottingham grade 3 and Her2-positive/triple-negative had significantly inferior RFS. Multivariate analysis showed that the presence of LVI (HR = 4.60, 95% CI. 2.32–9.10) and grade 3 (HR = 4.99, 95% CI. 1.06–23.48) were the independent risk factors for tumor recurrence; the adjuvant radiotherapy (HR = 0.35, 95% CI. 0.14–0.92) prevented the tumor recurrence. Furthermore, we studied the impact of adjuvant radiotherapy and chemotherapy on these two factors. For investigating the effect of adjuvant radiotherapy on the presence of LVI and grade 3, patients were categorized as receiving and not receiving radiotherapy. No RFS difference was noted between patients with and without LVI or with and without grade 3 in patient group receiving adjuvant radiotherapy; however, the presence of LVI and grade 3 resulted in significantly worse RFS in patient group without receiving adjuvant radiotherapy. For adjuvant chemotherapy, patients with LVI or grade 3 had significantly inferior RFS than that without LVI or grade 3 in both patient groups of receiving and not receiving adjuvant chemotherapy.

Conclusion: LVI and Nottingham grade 3 were the independent risk factors to predict tumor recurrence. Adjuvant radiotherapy improved the RFS in patients with these unfavorable factors.No significant relationships.