Title

Is young age an independent adverse prognostic factor in carcinoma breast? - A retrospective comparative study from a tertiary care cancer centre in south India

Introduction

Carcinoma breast in young age is usually associated with worse clinical and pathological factors like more TNBC and Her2 positivity. Many authors had reported that young age is an independent adverse prognostic factor apart from these bad clinico pathological factors.

Method

Patients with non metastatic carcinoma breast who had registered in our hospital during the year 2012 were included in the study. Treatment details and survival data till 31st July 2019 were retrospectively collected from medical record library and via telephonic interview. Patients were grouped into two based on their age at diagnosis (less than or equal to 40 and more than 40). Kaplan meier method employed for survival analysis. Survival comparison was done using log rank test. Cox proportional hazards regression analysis done for assessing the risk.

Results

Out of 1612 patients, 281 (17%) were young breast cancer. Median follow up period was 52 months. Young patients presented in more advanced stage and had more TNBC status. Pathological factors like grade, LVI,ECS and nodal yield were not different between the groups. BCS rate was significantly high in young patients. Young patient group had lower 5 Year OS (75.9% v/s 82.5%) and DFS (67.9% v/s 73.3%) but only with marginal statistical significance (p 0.056). In Cox univariate analysis T,N stage, ER,Her 2 status,LVI,ECS, nodal yield, local and distant recurrence were found to affect the OS, But in multivariate analysis only N stage, ER status and distant metastasis were found to be the independent risk factors affecting survival.

Conclusions

The proportion of young breast cancer is very high in our population. Young patients present in advanced stage and had adverse pathological characteristics. But age is not an independent risk factor for worse prognosis, even though they are associated with statistically nonsignificant drop on survival.