

Role of Post Mastectomy Radiotherapy in T1, T2 Lesions With 1-3 Positive Axillary Lymph Nodes Study Of 101 Cases

Nikhil Garg

Gujarat Cancer and Research Institute, India

Abstract

Background: Post mastectomy radiotherapy (PMRT) reduces loco-regional recurrence (LRR) and improves overall survival. There is international consensus to recommend PMRT for patients with tumour size more than 5 cm, tumour invasion of the skin, pectoral muscle or chest wall and patients with > 4 positive lymph nodes. However, the role of PMRT for patients with T1, T2 disease with 1–3 positive LN is still controversial. The side effects of radiotherapy and its associated morbidity have to be considered in the risk benefit ratio, thus difficult to arrive at consensus in early breast cancer.

Methods: 101 patients treated between 2012 to 2015 were studied retrospectively, The inclusion criteria for this analysis were: (1) Female patients with unilateral breast cancer and no distant metastasis at initial diagnosis who underwent mastectomy and axillary lymph node dissection; (2) postoperative pathology indicated T1–2 and 1–3 positive axillary lymph nodes (T1–2N1M0) disease, at least 10 lymph nodes removed by axillary dissection; (3) complete surgical resection of the tumor and negative margins; (4) complete estrogen receptor (ER), progesterone receptor (PR) and human epithelial growth factor receptor family 2 (Her2) status; (5) No neoadjuvant chemotherapy was administered before surgery and endocrine therapy was performed based on the hormone receptor status. In order to study the research questions, we formulated hypotheses as follows, 1. Radiotherapy does not have any impact on recurrence post mastectomy. 2. There is no influence of Peri nodal extension on recurrence. The above hypotheses were tested using chi-square test.

Results: Recurrences were obtained in 9 amongst radiotherapy and without radiotherapy in 16. When chi square was applied, the value was highly significant. Hence our hypothesis was rejected. Also in case of PNE with recurrence and radiotherapy, 8 had PNE with radiotherapy and recurrence and 27 had no recurrence, p value was 0.013% hence highly significant.

Conclusions: Radiotherapy should be strongly considered in patients with 1-3 nodes post mastectomy as it decreases the chances of recurrence

Biography: Nikhil Garg has completed his MS in the year 2015. He is Gold medalist in his masters degree. He is now pursuing super

specialization degree, MCh in surgical oncology. He is working in Gujarat Cancer and Research Institute, Ahmedabad, India. It is a premier cancer institute in the country.