

Letter to the Editor

Comment

Post mastectomy adjuvant radiotherapy in breast cancer: A comparison of three hypofractionated protocols

Madam, We read with interest the article by Abubaker Shahid et al¹ published in May 2009 JPMA. We would like to comment on some of the results of this study.

This study has used in one arm, 27Gy in 5 fractions over a week. The UK FAST trial² has used 5.7 Gy-6.0Gy clinical trials.³ Cobalt 60 was used for all patients; however it is appropriate to use linear accelerator for patients with more than 20 cm thickness to minimize skin reactions.⁴

Follow up period is not mentioned. The data analysis was performed on all accrued patients suggesting that there was no lost to follow up.

The early Breast trialists' Colloaborative Group (EBCTCG) analysis⁵ reported 1% cardiac mortality at 15 years. Hypofractionated radiotherapy, can make these figures worse. In study by Abubaker et al, 168 patients (56%) were accrued between 2001 to 2004, making it difficult to comment on cardiac mortality due to short follow up period.

Echocardiogram to assess radiation induced cardiac damage is not reasonable; rather radionuclide imaging should be advised.⁶

once weekly for five weeks. There is no data suggesting radiobiological equivalence between 5.7Gy weekly versus 5.4 Gy daily.

All patients were planned by 2D planning system; however a CT planning system must be a part of planning while considering hypo fractionation in Mutahir Ali Tunio, Mansoor Rafi

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References

1. Shahid A, Asghar S, Murad M, Athar T, Yunus ZN. Post mastectomy adjuvant radiotherapy in breast cancer: a comparison of three Hypofractionated Protocols. *J Pak Med Assoc* 2009; 59: 282-7.
2. Yarnold J, Bloomfield D, LeVay J. Prospective randomised trial testing 5.7gy and 6.0 Gy fractions of whole breast radiotherapy in women with early breast cancer. (FAST) Trial *Clin Oncol* 2004; 16: S30.
3. Athas WF, Adams-Cameron M, Hunt WC, Amir Fazli A, Key CR. Travel distance to radiation therapy in the management of early breast cancer. *J Natl Cancer Inst* 2003; 95: 1205-10.
4. Frazier A, Du M, Wong J, Vicini F, Taylor R, Yu C et al. Dosimetric evaluation of the conformation of the multileaf collimator to irregularly shaped fields. *Int J Radiat Oncol Biol Phys* 1995; 33: 1229-38.
5. Recht A. Which breast cancer patients should really worry about radiation induced heart disease and how much? *J Clin Oncol* 2006; 60: S390-1.
6. Demirci S, Nam J, Hubbs JL, Nquyen T, Marks LB. Radiation induced cardiac toxicity after therapy for breast cancer: interaction between treatment era and follow up duration. *Int J Radiat Oncol Biol Phys* 2009; 73: 980-7.