

## عنوان مقاله:

Comparative evaluation of lung absorbed dose in different methods of radiotherapy after mastectomy

## محل انتشار:

دهمین کنگره بین المللی سرطان پستان (سال: 1393)

تعداد صفحات اصل مقاله: 1

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## خلاصه مقاله:

The aim of radiotherapy is deliver the desired dose to the target volume and minimizing the dose of sensitive tissues to less than the tolerance of the normal tissues to be protected from the effects of radiation. Material and method: For practical implementation of techniques, trunk phantom and EDR II film manufactured by German Kodak companies are used. For dose-volume curve plotting and data extraction we used from MATLAB 2012 software. In this study four technique of tangential photon, Electron technique with two field of 90 degree, Electron technique with two 45 field of degree and electron arc therapy designed by TIGRT software and then been studied. Eventually three of the these techniques have been practically implemented on phantom then Information about the design and practical implementation of techniques for dose of target volume and 30% of lung volume dose compared in dose-volume curve. Result: The average doses to the target volume for electron technique with field of 90 degrees, the highest value of 109.3 percent. In practical dosimetry for tangential photon technique has received 100% of the target dose of 4500 cGy. Conclusion: Dose coverage of the target volume in photon technique and the doses delivered to lung tissue in electron technique were acceptable. Lung doses from electron technique with 45 degrees field is higher than two previous methods, However the doses level for each technique is less than the acceptable dose.

## کلمات کلیدی:

Radiotherapy, Breast cancer, Mastectomy, EDR II film

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