

Analysis of the effect of radiotherapy on malignant pleural mesothelioma when given on adjuvant or palliative basis

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Abstract

Purpose of study: This retrospective study was designed to evaluate the response and survival of malignant pleural mesothelioma to radiotherapy when delivered with surgery and chemotherapy and when delivered alone or with chemotherapy.

Patients & Methods: A study for 110 patients with malignant pleural mesothelioma who presented to radiotherapy department, National Cancer Institute, Cairo and received radiation therapy in the period from January 1999 to July 2007.

Results: 46 patients (41.8%) received trimodality therapy (surgery & adjuvant or neoadjuvant chemotherapy & adjuvant radiotherapy), bimodality therapy (chemotherapy & radiotherapy) in 38 patients (34.5%), 26 patients (23.6%) received single modality therapy (palliative radiotherapy), 22 patients (20%) developed local recurrence, 22 patients (20%) developed distant metastases 7 months after end of treatment, 14 patients (12.7%) developed local disease progression, 25 patients (22.7%) are still alive and free of disease at time of reporting. The median survival for all patients was 16 months, 12 & 18 months overall survival were 63.6% & 31.8% respectively and median survival for stage II, III, IV patients was 16.5, 12.5 & 8 months respectively.

Conclusion: Multimodality approach involving surgery, chemotherapy & radiotherapy seems to be a promising treatment modality especially in stages II, but still with low survival rates which results in the needs to explore for newer treatment strategies and well-designed randomized trials.