

Inflammatory pseudotumor of mediastinum treated with tomotherapy and monitored with FDG-PET/CT: case report and literature review

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ABSTRACT

Mediastinal inflammatory pseudotumor is a rare disease with reactive pseudoneoplastic features and a proven capacity for local invasion. The radiographic appearance of inflammatory pseudotumor is quite non-specific and the definitive diagnosis is based on the histological evaluation of tissue specimens. Resection of the lesion is the treatment of choice. However, nonsurgical treatments such as radiotherapy and steroids have been employed in the setting of incomplete surgical resection, tumor recurrence, and patients being unfit for surgery. The case described here is being reported because of the rare mediastinal location and atypical treatment approach including salvage irradiation and monitoring with FDG-PET/CT. Because of the irregular target volume inside the mediastinum as defined by FDG-PET/CT and the significant pulmonary comorbidity, it was deemed necessary to optimize dose delivery with intensity-modulated radiation therapy (IMRT). A possible gain by means of daily control of patient setup with image-guided radiation therapy was also hypothesized and we used tomotherapy to irradiate the lesion. The first FDG-PET/CT after treatment confirmed further reduction of the metabolic activity followed by stable disease in the mediastinum, with no new occurrence of disease 16, 24 and 30 months after tomotherapy. **Free full text available at www.tumorionline.it**

Key words: inflammatory pseudotumor, mediastinum, PET/CT, tomotherapy.

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