
# THE GROWING ROLE OF RADIOTHERAPY FOR THYMIC MALIGNANCIES

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Thymic epithelial tumors (TET) are a group of rare, heterogeneous thoracic tumors, they account for 20% of mediastinal tumors and less than 1% of all neoplasms. Thymomas are the most commom type and thymic carcinomas account for 10-15% of TETs.

Treatment of these tumors is complex because of their heterogenity nature. The recomendations are based on retrospective data or non-randomised studies.

The scenarios of treatment for radiotherapy are: preoperative, postoperative (PORT), combined with ChT in unresectable tumors, recurrence disease and palliative treatments.

The postoperative radiotherapy is the most common scenario in thymomas and thymic carcinomas. The indications are: positive surgical margins R1, R2 and stages IIb-III (R0 if histology B2-B3). The recomended doses are in R0: 45-50Gy, R1: 50-54Gy, R2: 60-70Gy.

For unresectable tumors a multidisciplinary team is recomended to evaluate each case. Radiotherapy in this scenario can be neoadyuvant with chemotherapy, or radical Chemo-radiotherapy (secuencial or alone) recomended doses are 60-70Gy.

In recurrence disease, the pleura is the most frecuent local recurrence, about 25% of patients stage IV at diagnosis. The elective treatment is surgery. For unresectable lesions radiotherapy with IMPRINT technique of IMRT is an option, with recomendable doses more than 50 Gy.

In advanced stages palliative radiotherapy can be consider for pain realief or descompressive treatment.

New radiotherapy techniques like IMRT, VMAT, SBRT offers high precision therapy and low toxicity combined with other treatments

Future roles may involve combinations with inmunotherapy or new systemic treatments.

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