



# LA GESTIONE DIAGNOSTICO-TERAPEUTICA DEL PAZIENTE CON CARCINOMA DIFFERENZIATO DELLA TIROIDE A FERRARA: SPECIALISTI A CONFRONTO

Il carcinoma tiroideo avanzato metastatico  
Quando interviene la radioterapia?

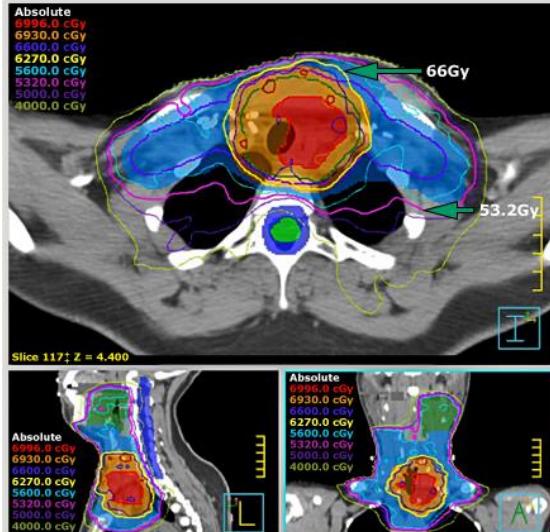
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UOC RADIOTERAPIA

Ferrara – Cona 24 marzo 2022



# INTRODUZIONE

- Ch+RI sono attualmente lo standard terapeutico in pz affetti da CDT:
- tale associazione consente di guarire l'80% circa dei pazienti
- I pazienti in stadio localmente avanzato (pT4 e/o pN1b, R1, R2, non operabili radicalmente) ricadono invariabilmente con un rateo di sopravvivenza a 5 aa del 50% circa.
- Alcuni CDT che esprimono BRAF e/o alcune varianti istologiche non esprimendo NIS non sono curabili adeguatamente con la RI.
- Il controllo loco-regionale rappresenta un end point importante sia per la QoL sia per la sopravvivenza causa-specifica.



## Dose prescription

Differentiated thyroid carcinoma, medullary thyroid carcinoma, anaplastic thyroid carcinoma

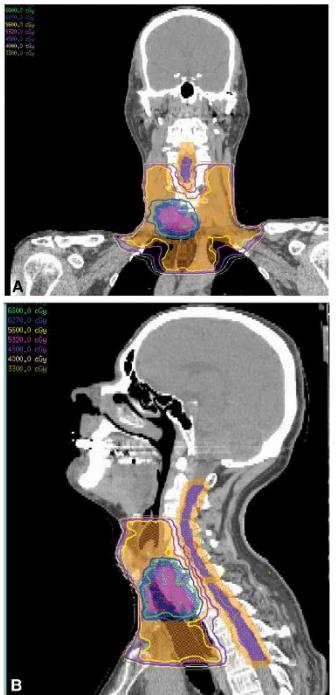
- Macroscopic disease: 66-70 Gy (1.8-2.0 Gy per fraction)
- High-risk volumes (operative/tumor bed, thyroid gland volume, microscopic disease, close or microscopically positive margins, node with extracapsular extension): 63-66 Gy (1.8-2.0 Gy per fraction)
- Intermediate-risk volumes (positive nodal areas without extracapsular extension): 59.4-63 Gy (1.8-2.0 Gy per fraction)
- Low-risk volumes (uninvolved cervical lymph node levels II-VII): 50-54 Gy (1.8-2.0 Gy per fraction)

## Linee Guida AIOM

Clin Endocrinol (Oxf). 2005

Eur J Endocrinol. 2006

Eur J Surg Oncol. 2001





# Ruolo della RT nella malattia a distanza

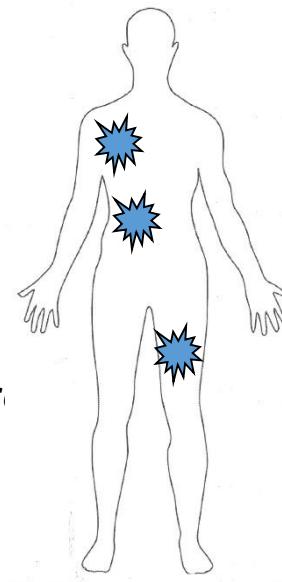
Le metastasi a distanza si sviluppano nel **10%** dei pz con DTC.

Nella metà dei casi sono presenti alla diagnosi o vengono scoperte nel corso di un follow-up medio di 3-4 aa.

Le sedi più coinvolte sono il **polmone** e soprattutto nei pz giovani lo **scheletro e encefalo**.

## OLIGOMETASTASI

- Improvement in the early detection of metastasis frequently allows the diagnosis of single or limited organ metastases (Oligometastatic stage is defined as 1-5 secondary lesions in 1-2 organs).

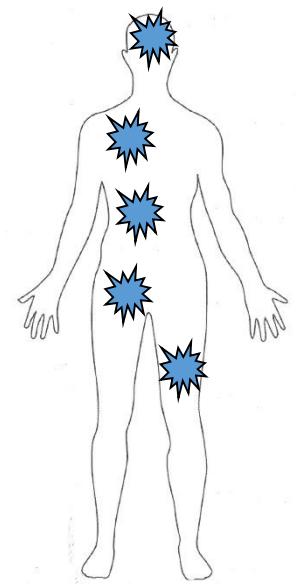


• Hellman and Weichselbaum (1995).. *"there is subgroup of patients with an intermediate phase of metastatic disease, that presents a potential for disease control with the ablation of the few metastases"*

- Are to prescribe only **palliative local treatments** for this kind of patients?

## SISTEMIC

- The clinical dogma proposes that metastases are either absent or are present in uncountable numbers.
- In accordance with this clinical dogma, when patient is metastatic :
  - *systemic therapies* are usually proposed to increase survival
  - *local therapy* is indicated only for palliative/sympthomatic intent.



Thyroid. 2009 2016

# External Beam Radiation Therapy for Thyroid Cancer

Qual è il trattamento delle metastasi nel carcinoma tiroideo avanzato?



Three-dimensional conformal radiation therapy (3D-C)

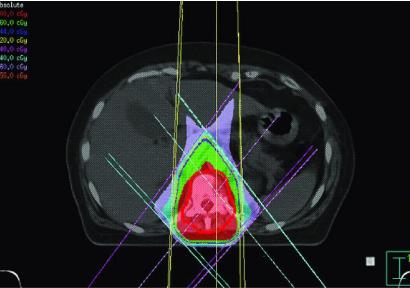
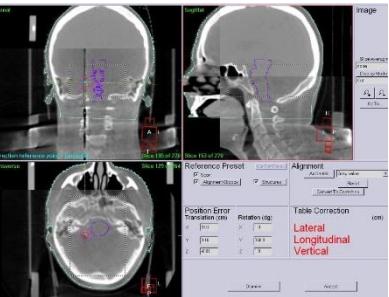
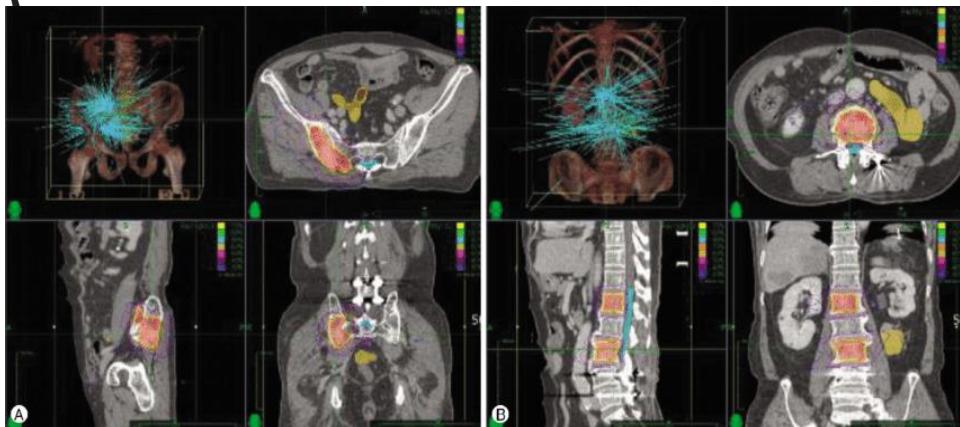


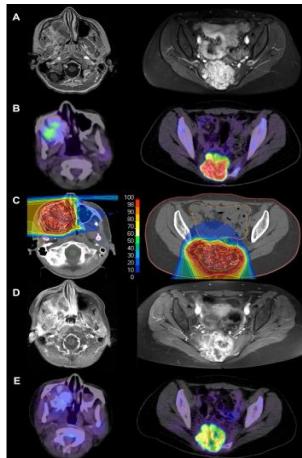
Image guided radiation therapy (IGRT)



Intensity modulated radiation therapy (IMRT)



Proton beam radiation therapy



Stereotactic radiosurgery

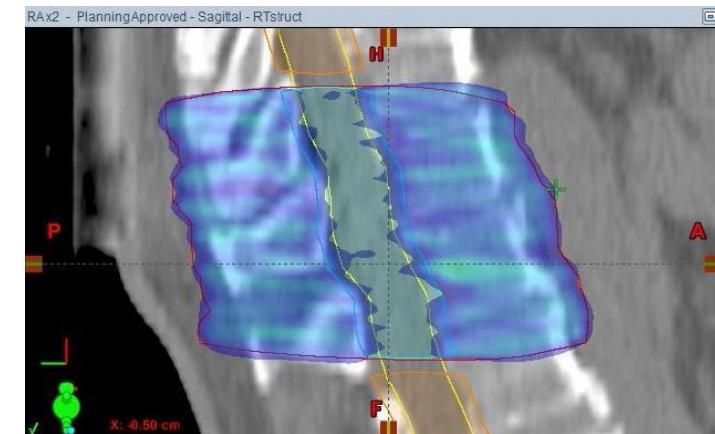
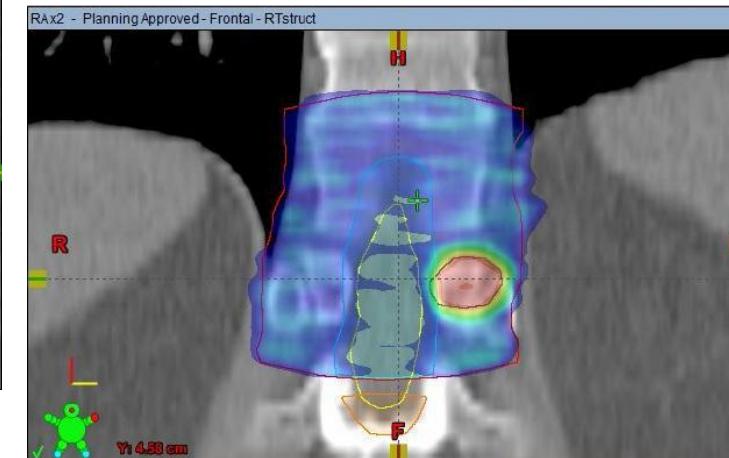
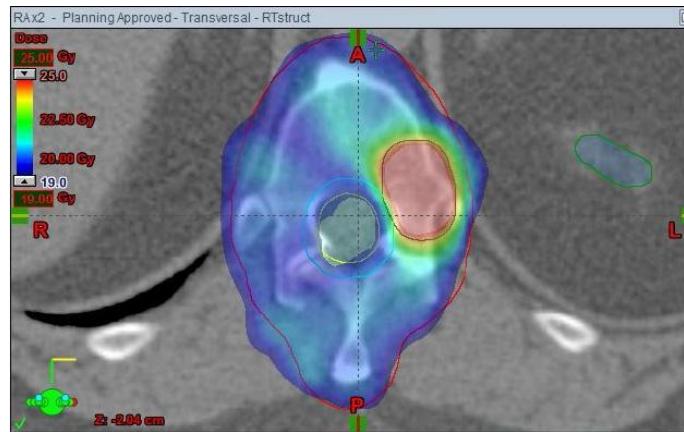
If a cancer does not respond to radioiodine therapy, external radiation therapy may be used to treat cancer that has come back in the neck or distant metastases that are causing pain or other symptoms

# METASTASI: solo palliazione?

*CONTROLLO LOCALE*

**OLIGOMETASTASI**  
**(Metastasi precoce)**

*Dosi elevate ablative ALTA conformazione DOSE*



Semin Radiat Oncol. 2018 October

Int J Radiat Oncol Biol Phys 2020 Nov



## RADIOTERAPIA DELLE METASTASI plurime: OBIETTIVI

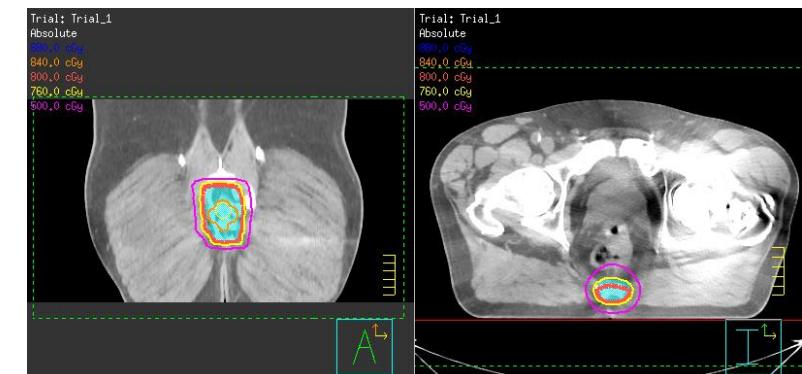
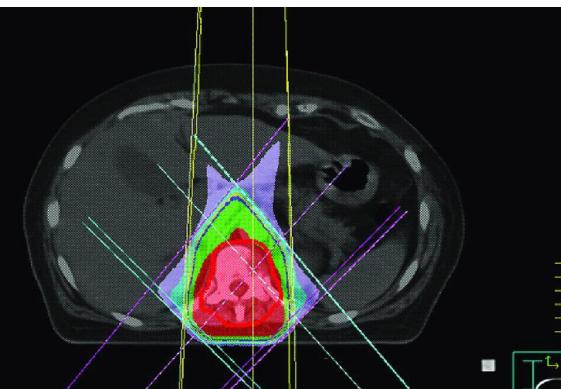


- Azione antalgica
- Azione ri-mineralizzante

- Dare sollievo dal dolore
- Migliorare la qualità di vita
- Prevenire gli eventi scheletrici
- Ridurre al minimo l'invalidità
- Migliorare la funzionalità



Dosage	Prognosis and Indications	Duration of Therapy	Response Rate
1 x 8 Gy	Prognosis: life expectancy <3 mo —painful uncomplicated bone metastases	1 d	60%-90%
2 x 7.5 Gy	Prognosis: life expectancy only a few weeks —bronchogenic carcinoma with bronchial occlusion/compression	1 wk	30%-90%
4-6 x 0.5-1 Gy 5 x 3-4 Gy	Inhibition of inflammation Prognosis: life expectancy <3-6 mo —bone metastases affecting soft tissue —metastatic bronchogenic carcinoma with imminent bronchial occlusion / bleeding, —ulcerated or painful metastases in soft tissue —multiple brain metastases, poor general condition and uncontrolled extracranial tumor manifestations	1 wk 1 wk	70%-90% 60%-90%
10 x 3 Gy	Prognosis: life expectancy <1 year —bone metastases with the aim of recalcification —advanced bronchogenic carcinoma	2 wks	60%-90%
13-15 x 3 Gy	Prognosis: life expectancy not very much longer than 1 year —bone metastases without any further tumor manifestations —advanced bronchogenic carcinoma, reasonable general condition, comorbidities	3 wks	60%-90%
20-30 x 2 Gy	Prognosis: life expectancy >1 year —advanced bronchogenic carcinoma stage III and good general condition (possibly also in the form of palliative radiochemotherapy)	4-6 wks	60%-90%
20-30 x 2-3 Gy IMRT	Patients in sufficient general condition with advanced tumors, re-irradiation, Patients in good general condition with, eg, isolated paraspinal metastases, isolated vertebral metastases affecting intraspinal areas	5-6 wks	65%-90%





ORIGINAL RESEARCH

# Thyroid Cancer Patients' View of Clinician Professionalism and Multidisciplinary Approach to Their Management



