



XIII CONGRESSO
AIRO 2013

Dip. Scienze Biomediche e delle
Immagini Morfologiche e Funzionali
SEZIONE DI SCIENZE RADIOLOGICHE

WORKSHOP

~~Management of the resective and neoplastic head and neck carcinoma~~

ofago cervicale

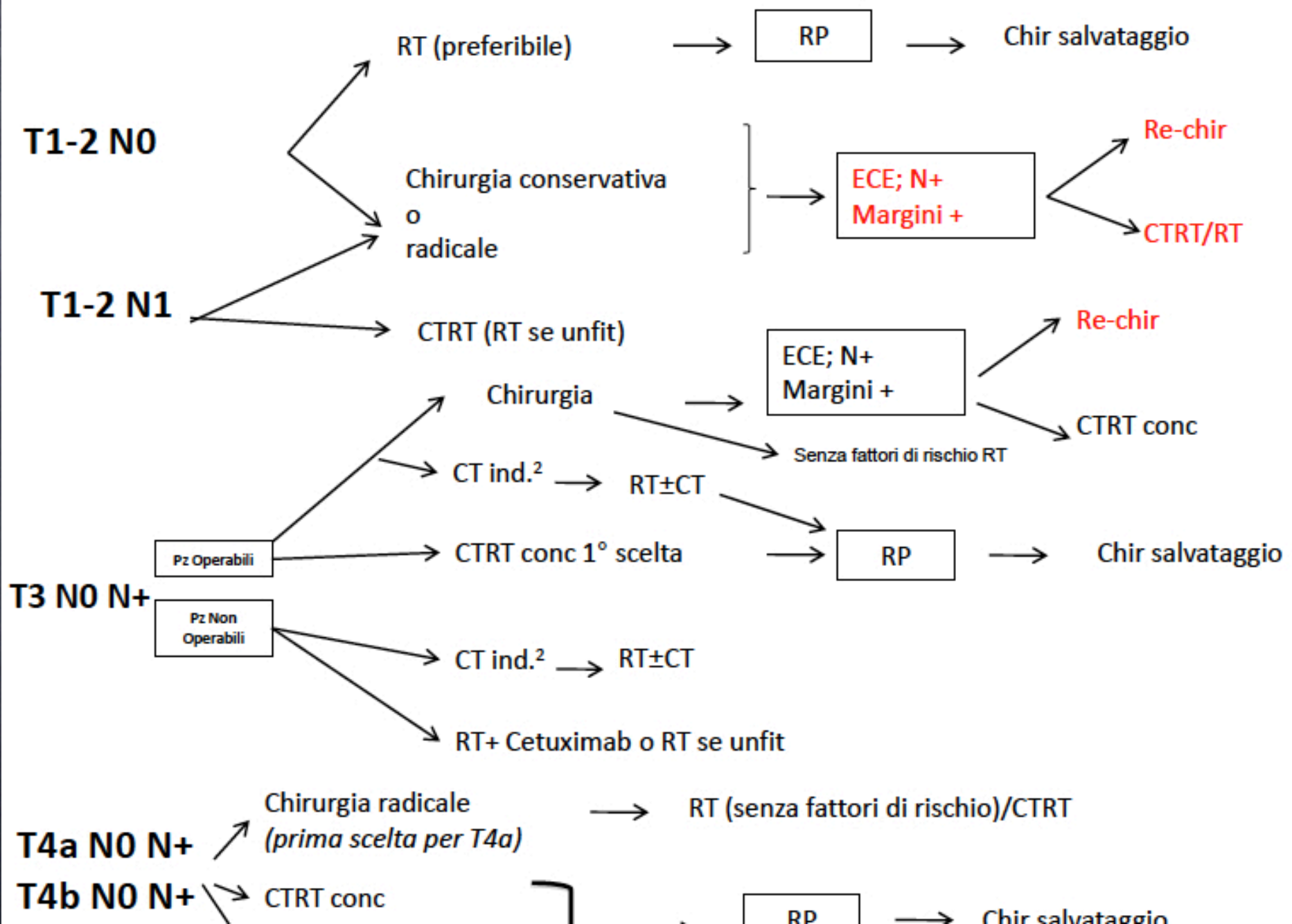
o identificate mediante impiego di metodi

esploranti.

Ruolo dell'imaging nella valutazione

della risposta e nel follow-up
Hermans R et al Radiology 214:681-687, 2000

CARCINOMI DELL' IPOFARINGE



Risposta al trattamento

Follow-up

IMAGING TC/RM "CONVENZIONALE"

Timing diagnostico Risposta al trattamento

Chemioterapia di induzione  ✓ 1 mese

Radioterapia  ✓ 2-3 mesi

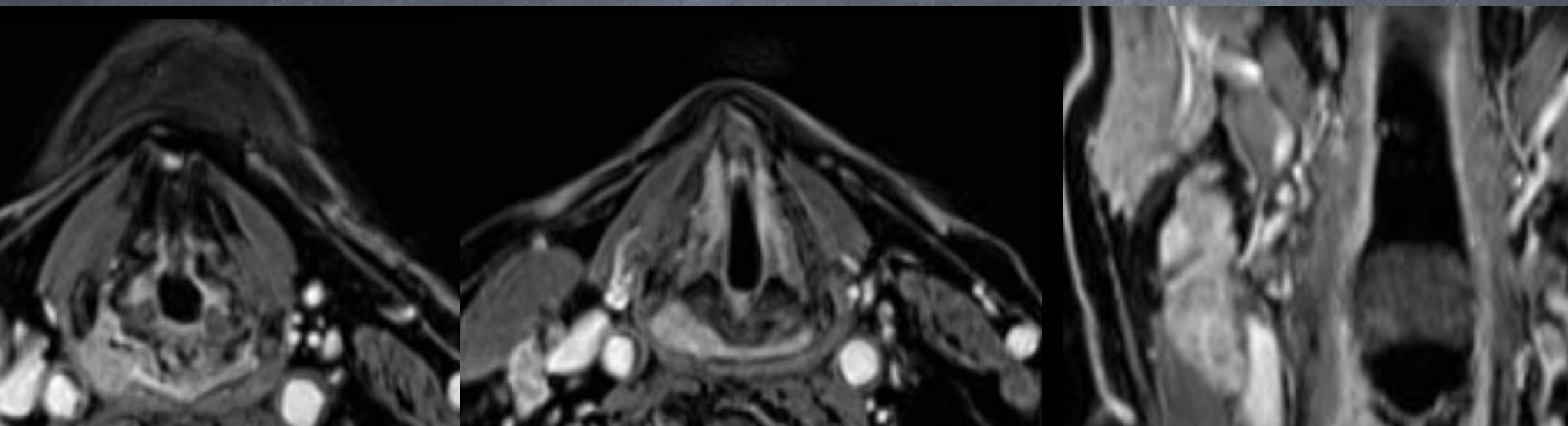
Chemioradioterapia  ✓ 2-3 mesi

AMETRI TC E RM "CONVENZIONALI"

variazioni del volume tumorale

Modificazioni strutturali della lesione

densità/intensità di segnale; impregnazione contrastografica



completa risoluzione



✓ Follow-up clinico

riduzione volume neoplasia
50% o lesione persistente
1 cm



✓ FDG-PET/biopsia

tessuto patologico < 1 cm e/
asimmetria dei tessuti
nodi



✓ Follow-up TC/
a 3-4 mesi

Hermans R. et al. Radiology 214:683-687; 2000

Limiti

Imaging avanzato"

CT-PET

Diffusione

Perfusione



“vedere meglio e prima”

Mukherji SK et al. Controversies: Is There a Role for Positron-Emission-Tomographic CT

Initial Staging of Head and Neck Squamous Cell Carcinoma? AJNR; 2006; 27:243-245

Hoehn CC et al. Diffusion-weighted MR Imaging in the head and neck. Radiology; 2010;

120-32

Taggioni L et al. CT Perfusion of Head and Neck Tumors: How We Do It. AJR; 2010; 194:

Abdel Razek AAK et al. Role of Diffusion-Weighted Echo-Planar MR Imaging in Differentiating

of residual or Recurrent Head and Neck Tumors and Posttreatment Changes. AJNR; 2009;

146-1452

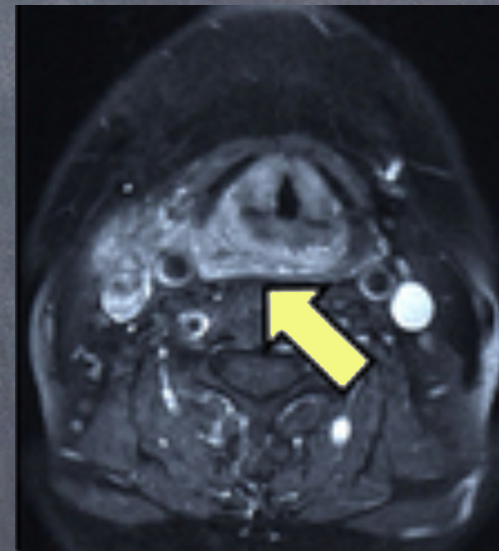
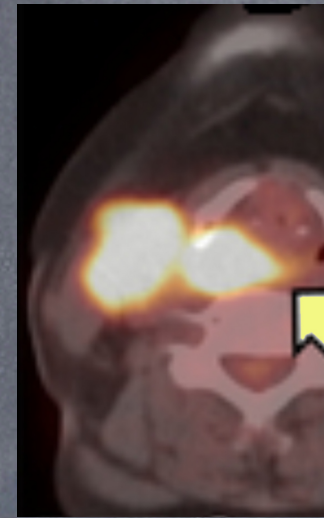
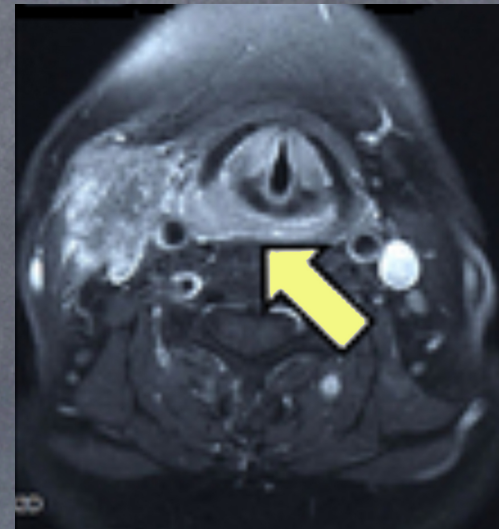
Schafer J et al. Diffusion Magnetic Resonance Imaging in the Head and Neck. Magn

PET

Journal of Surgical Oncology 2008;97:644-648

New Directions in Head and Neck Imaging

V. SHAH, MD,* JEFFERY R. WESOLOWSKI, MD, SAMEER A. ANSARI, MD,
AND SURESH K. MUKHERJI, MD
Department of Radiology, University of Michigan, Ann Arbor, Michigan



-CT can also be potentially utilized for determining response to chemotherapy
radiation. Comparison of pretreatment standard uptake values (SUVs) to SUVs
into treatment can allow measurement of the speed of response and also

Diffusione RM



• Maggiore caratterizzazione tissutale:

• *analisi qualitativa*

• *analisi quantitativa (calcolo ADC)*

• Basso tempo di acquisizione

• Ampia disponibilità RM a 1.5 T



- Valutazione rapida dell'effetto del trattamento

- Differenziazione tra esiti post-trattamento e residuo neoplasi

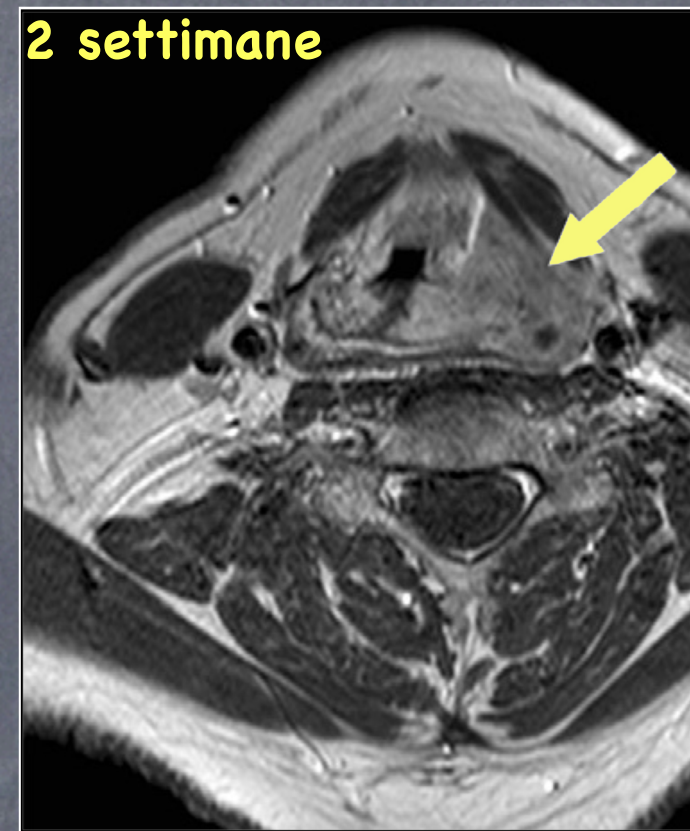
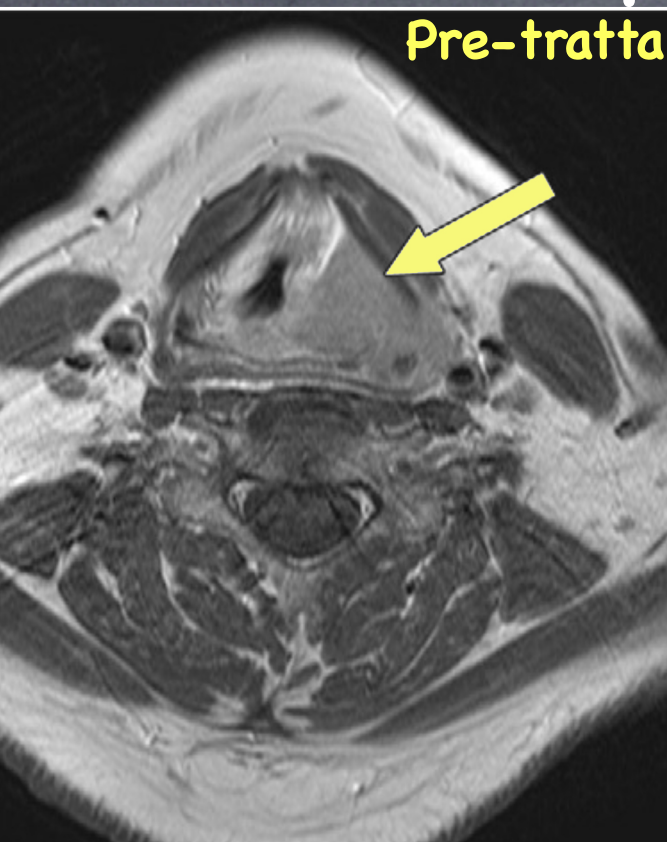
Limiti

• Dipendenza da caratteristiche strutturali anatomiche

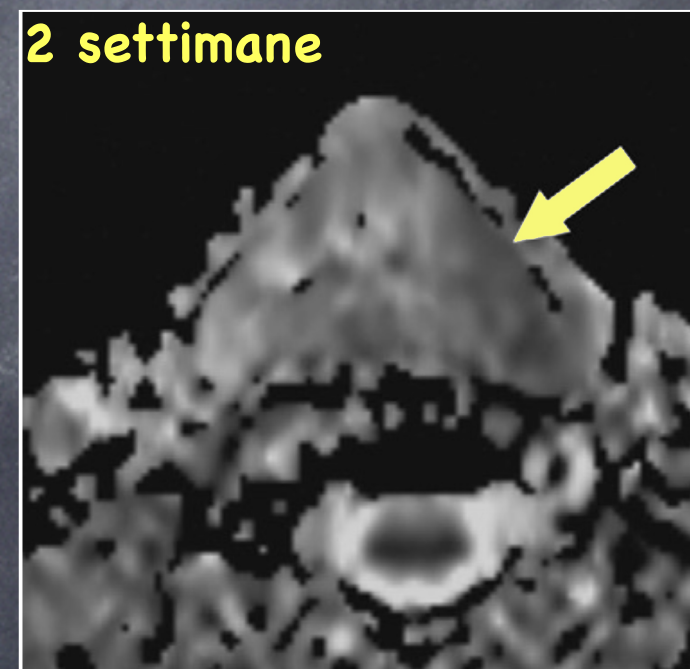
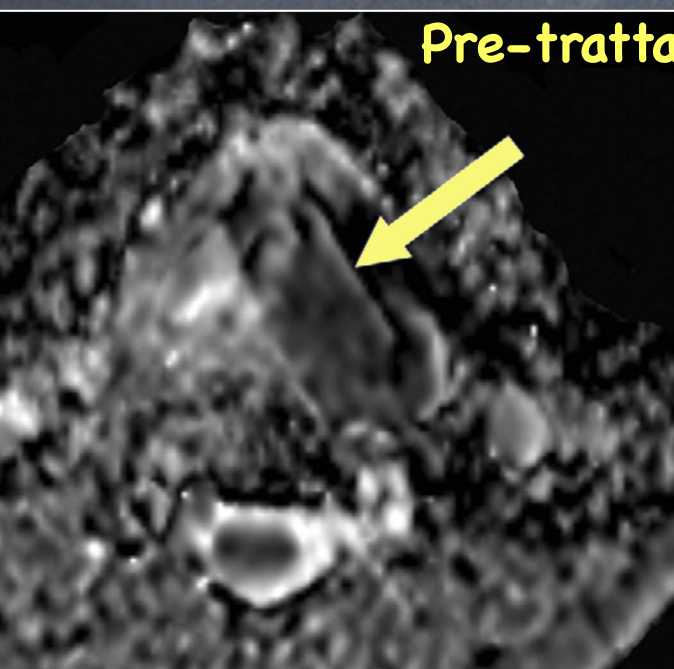
• Sensibilità ridotta in presenza di movimento

• Necessità di standardizzazione dei protocolli

Risposta al trattamento

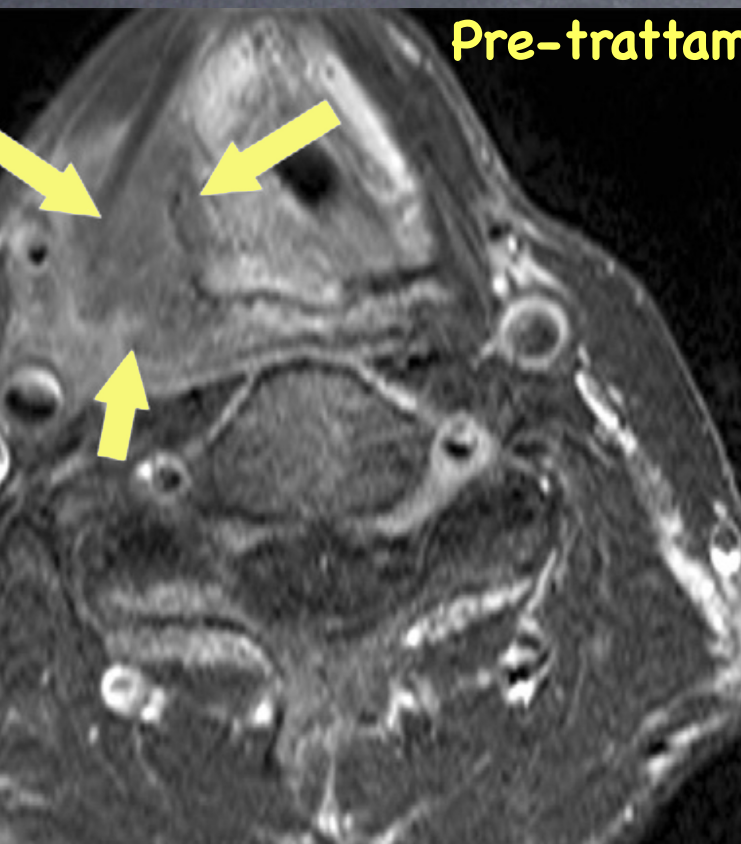


T1-weighted

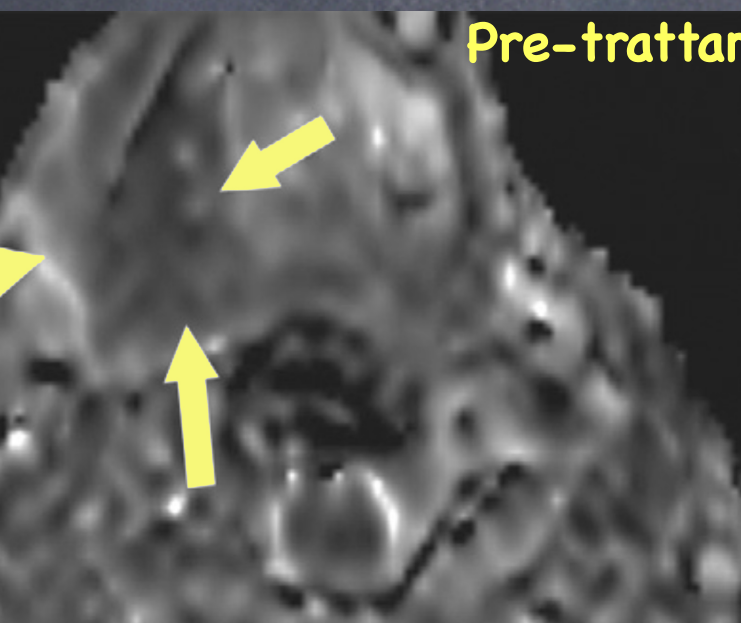
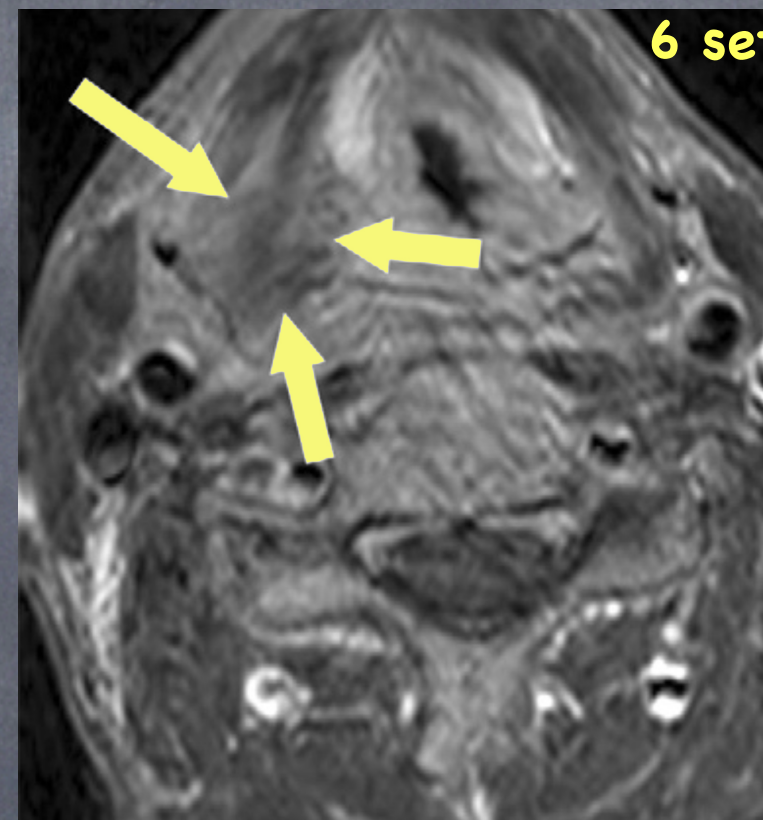


Diffusione

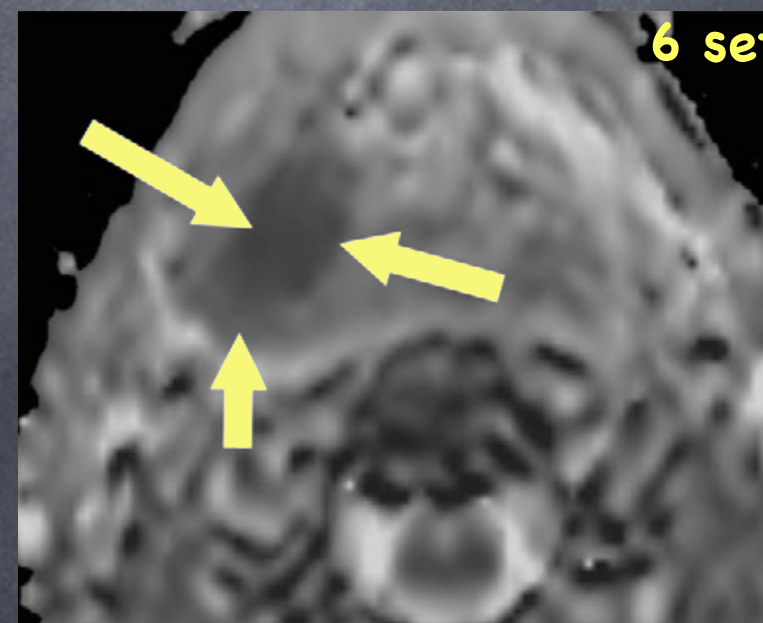
Risposta al trattamento



T1-weighted



Diffusione





Follow up

Trattamento chemio- e radioterapico

Trattamento chirurgico

Imaging

Modificazioni riscontrabili nei diversi controlli

Analisi morfo-strutturale del tessuto

CINOMI DELL' IPOFARINGE

FOLLOW UP

Ogni 6/12 mesi



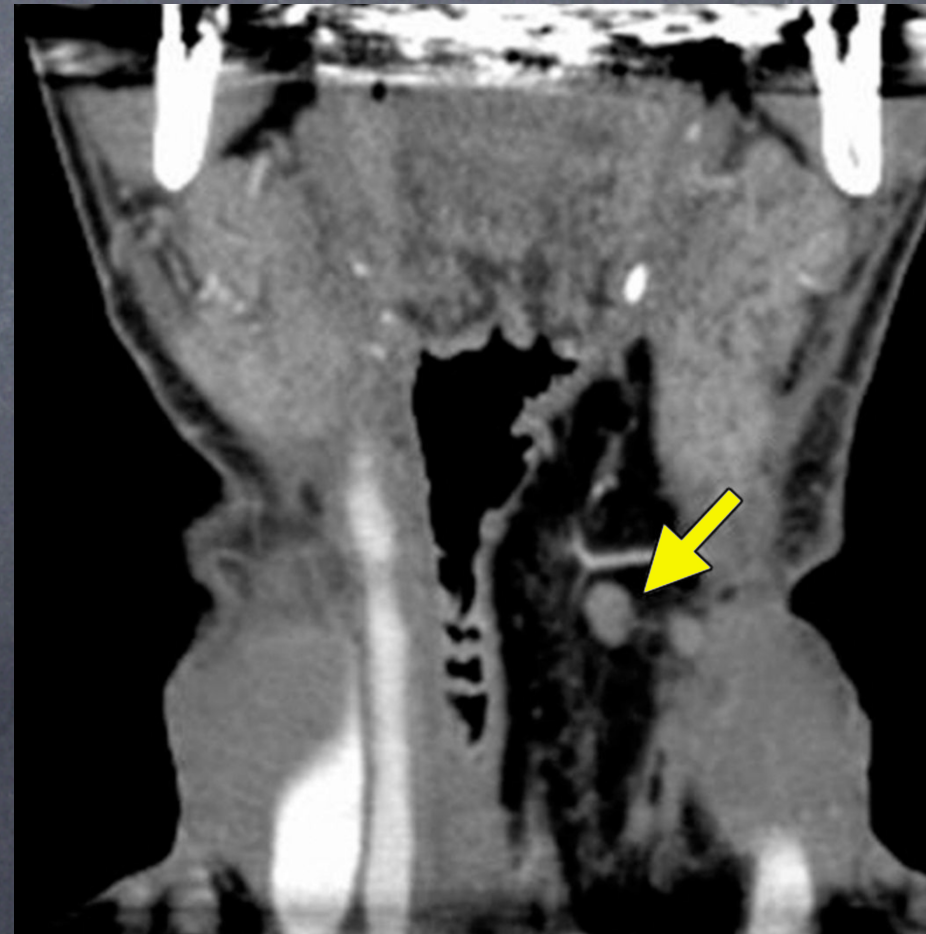
- Visita clinica+ fibroscopia
- TC/RM +mdc
- TC/PET x casi dubbi dopo TC/RM

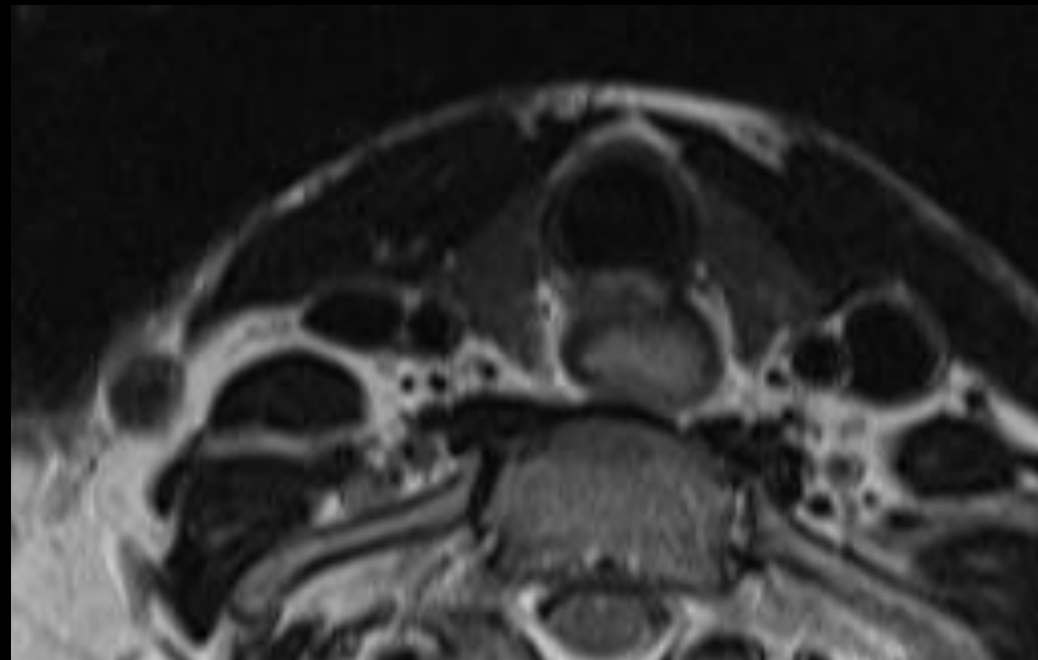
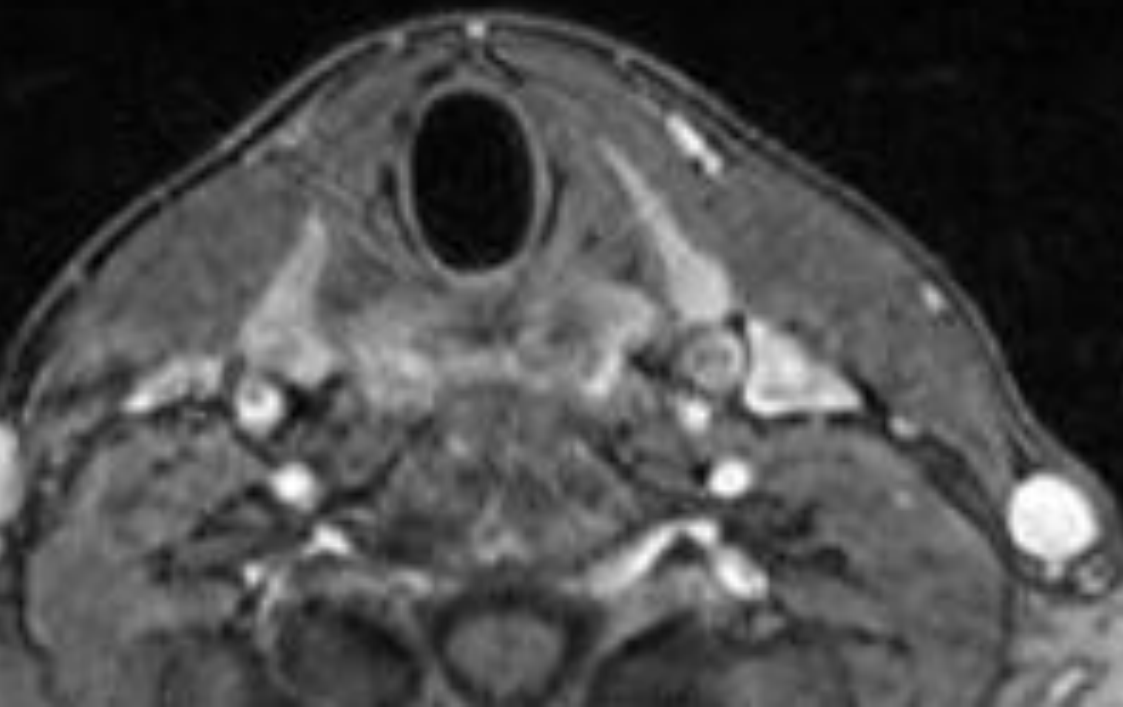
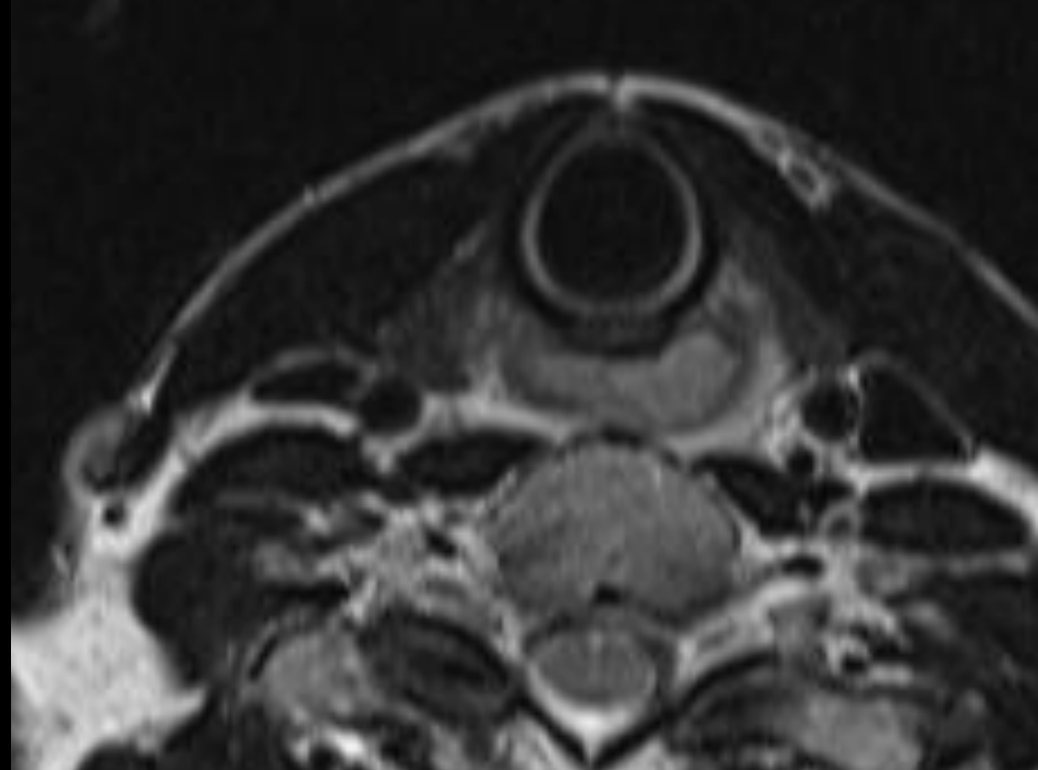
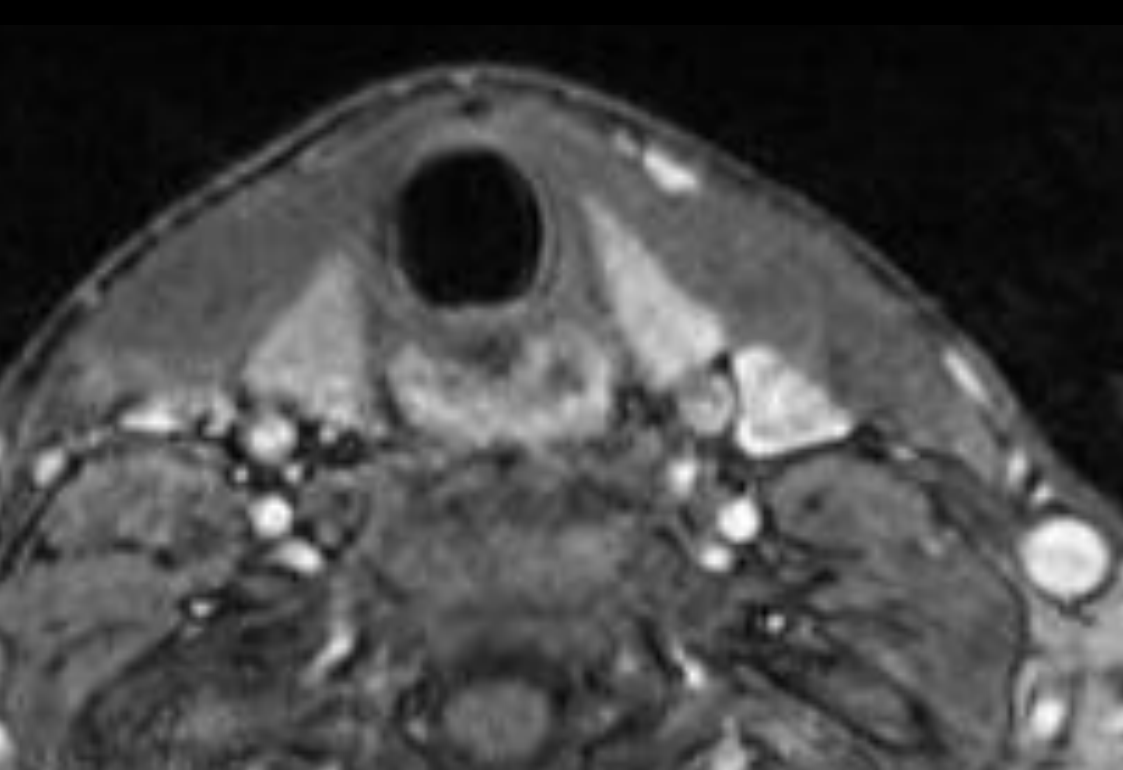
Imaging "prerequisiti"

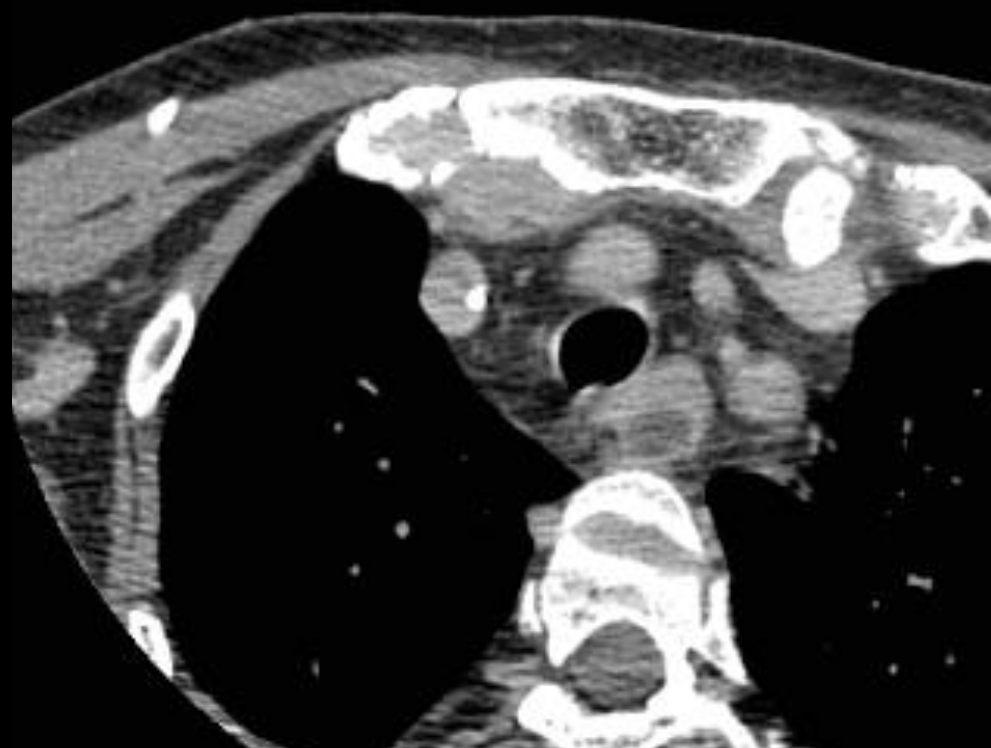
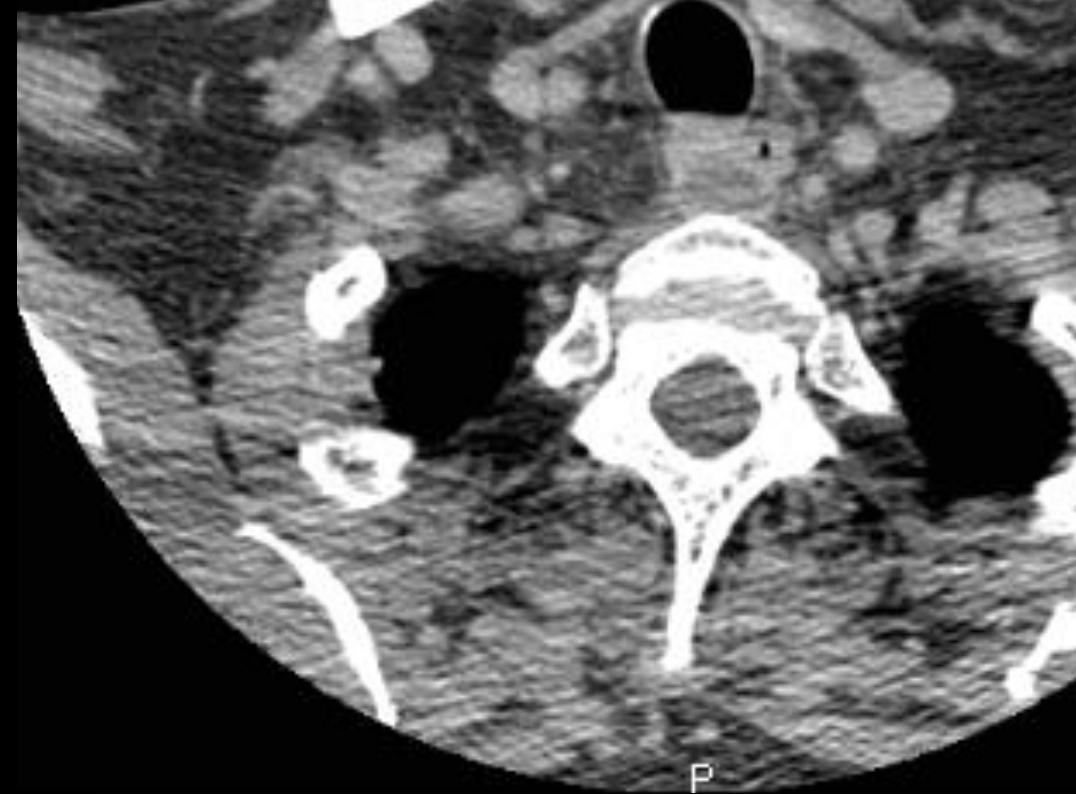
Primo studio TC/RM eseguito a 3-4 mesi dal trattamento

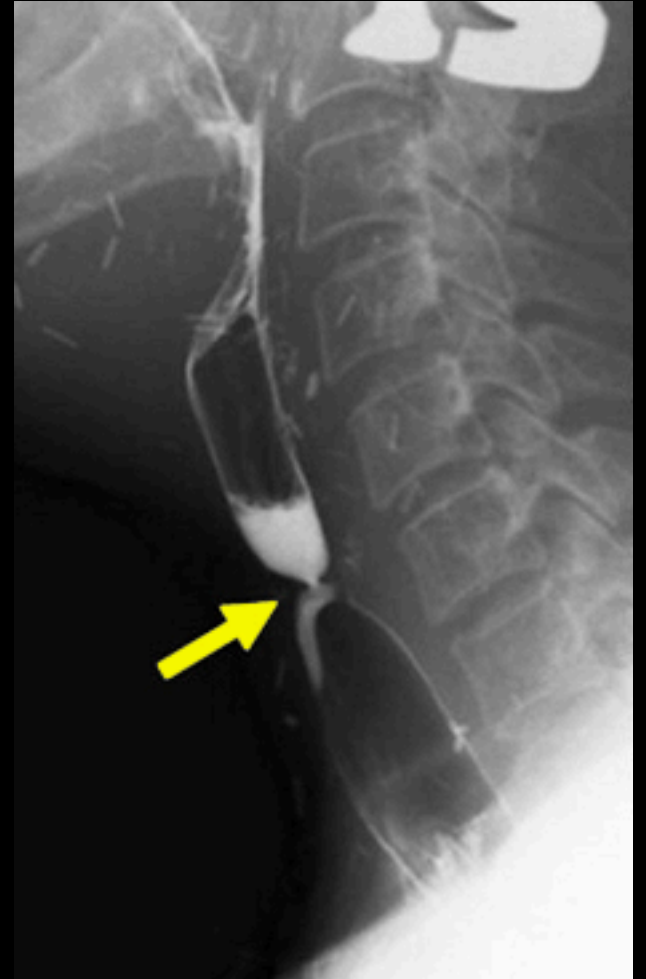
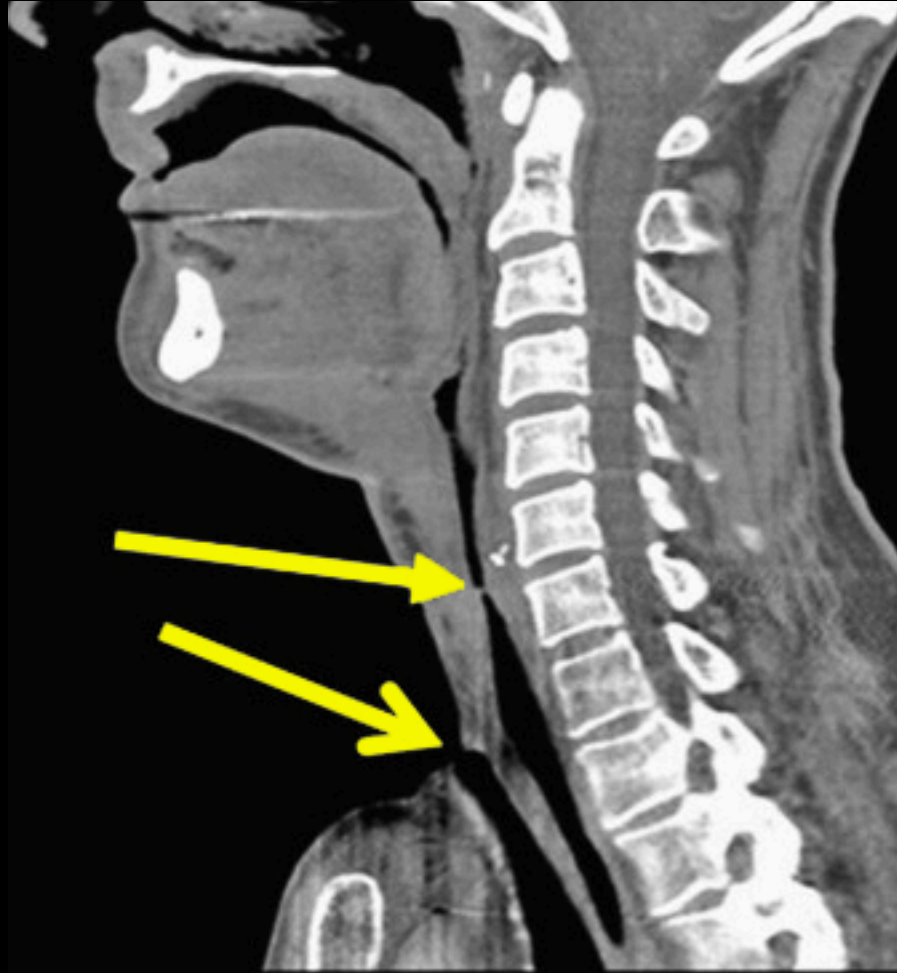
Informazioni sul tipo di chirurgia:

- trapianto ansa digiunale rivascularizzata
- trasposizione gastrica
- lembo miocutaneo
- trasposizione colica









TUMORI METACRONI NEL TRATTO AERO-DIGESTIVO

ASTASI A DISTANZA

denza del 18% nel follow-up

- Polmone
- egato
- cheletro

