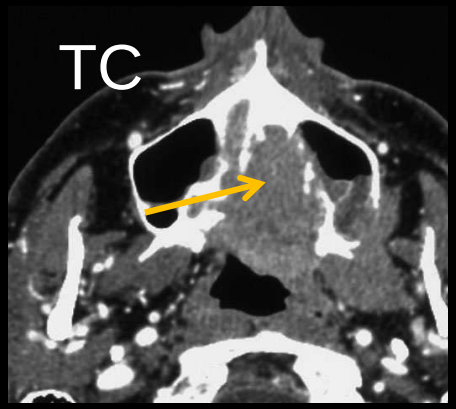
LE DIFFICOLTA' DELL'ITER DIAGNOSTICO-TERAPEUTICO IN ITALIA

AIROLDI Mario
Dir. S.C. Oncologia Medica 2
A.O.U San Giovanni Battista di Torino

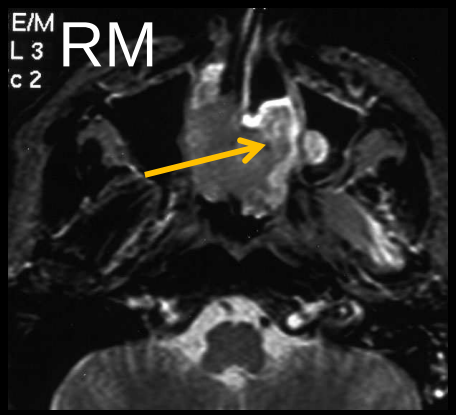
Stadiazione pre-trattamento complessa

Necessità di integrazione di metodiche

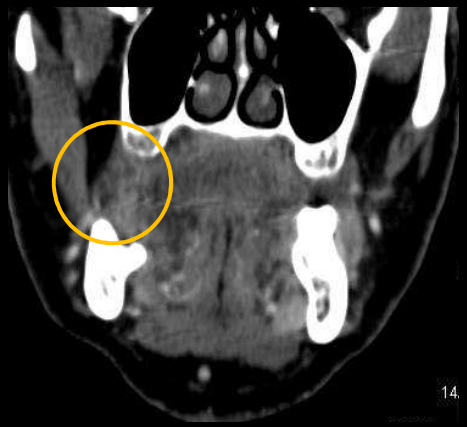
Infiltrazione neoplastica



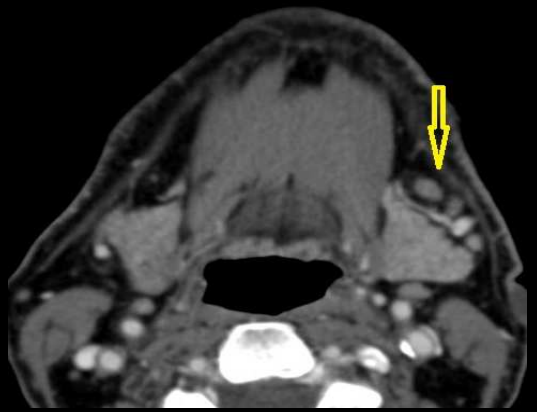
Componente flogistica

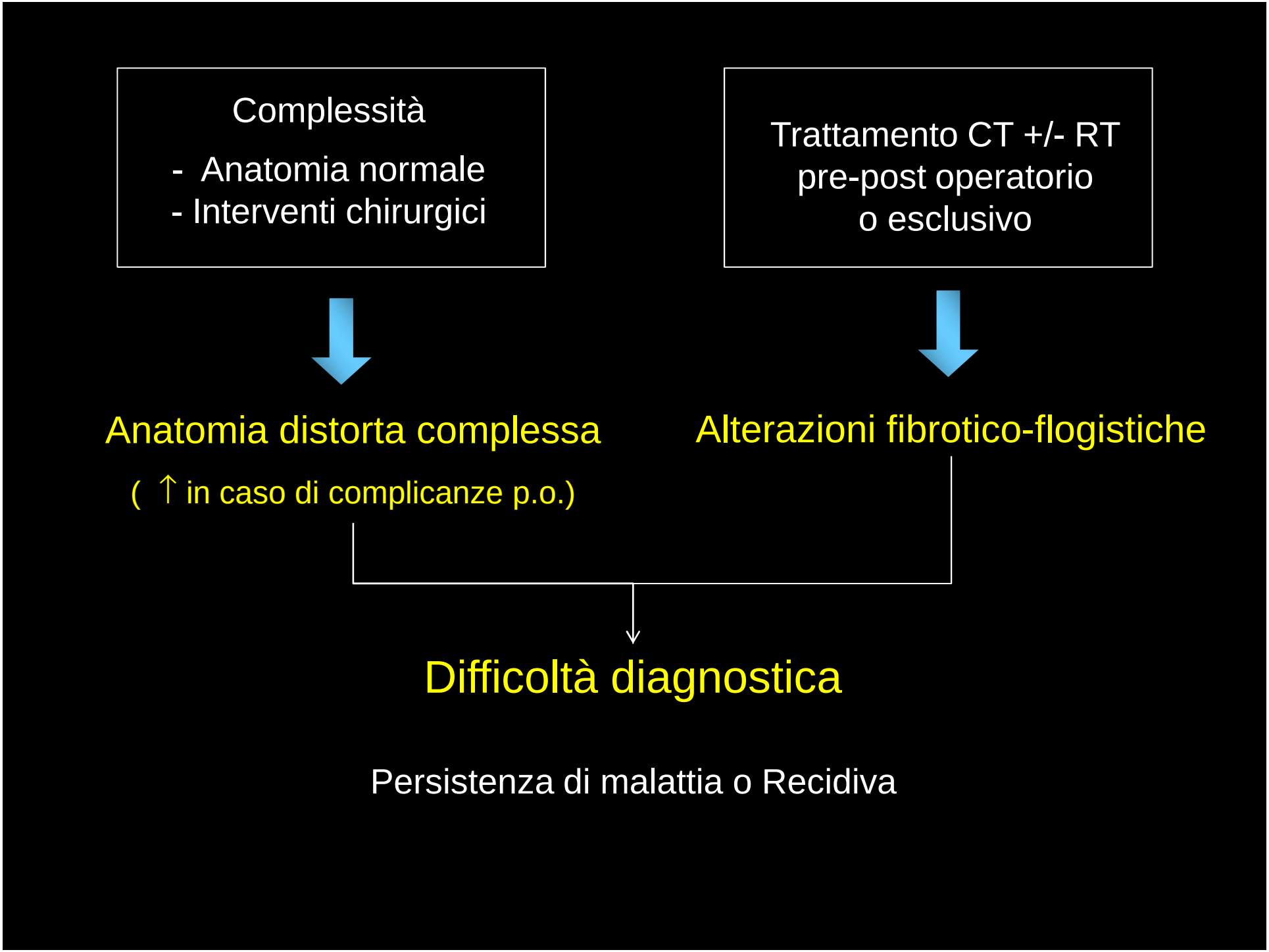


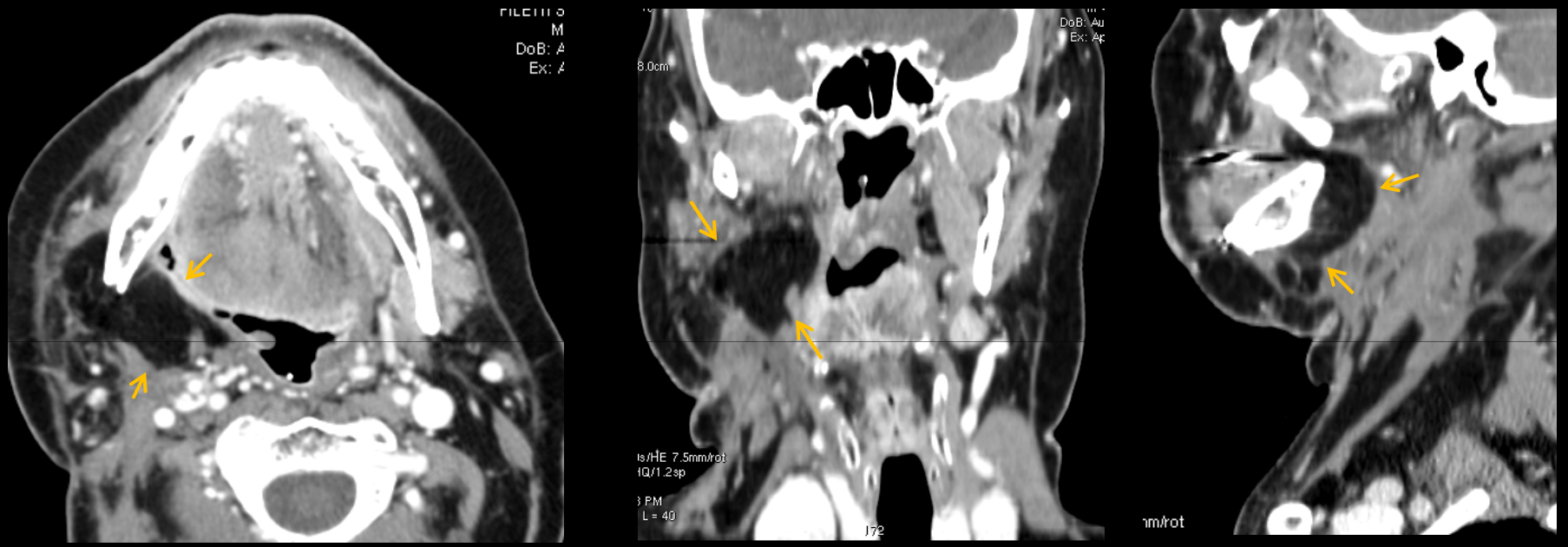
Limiti legati alla sede/struttura



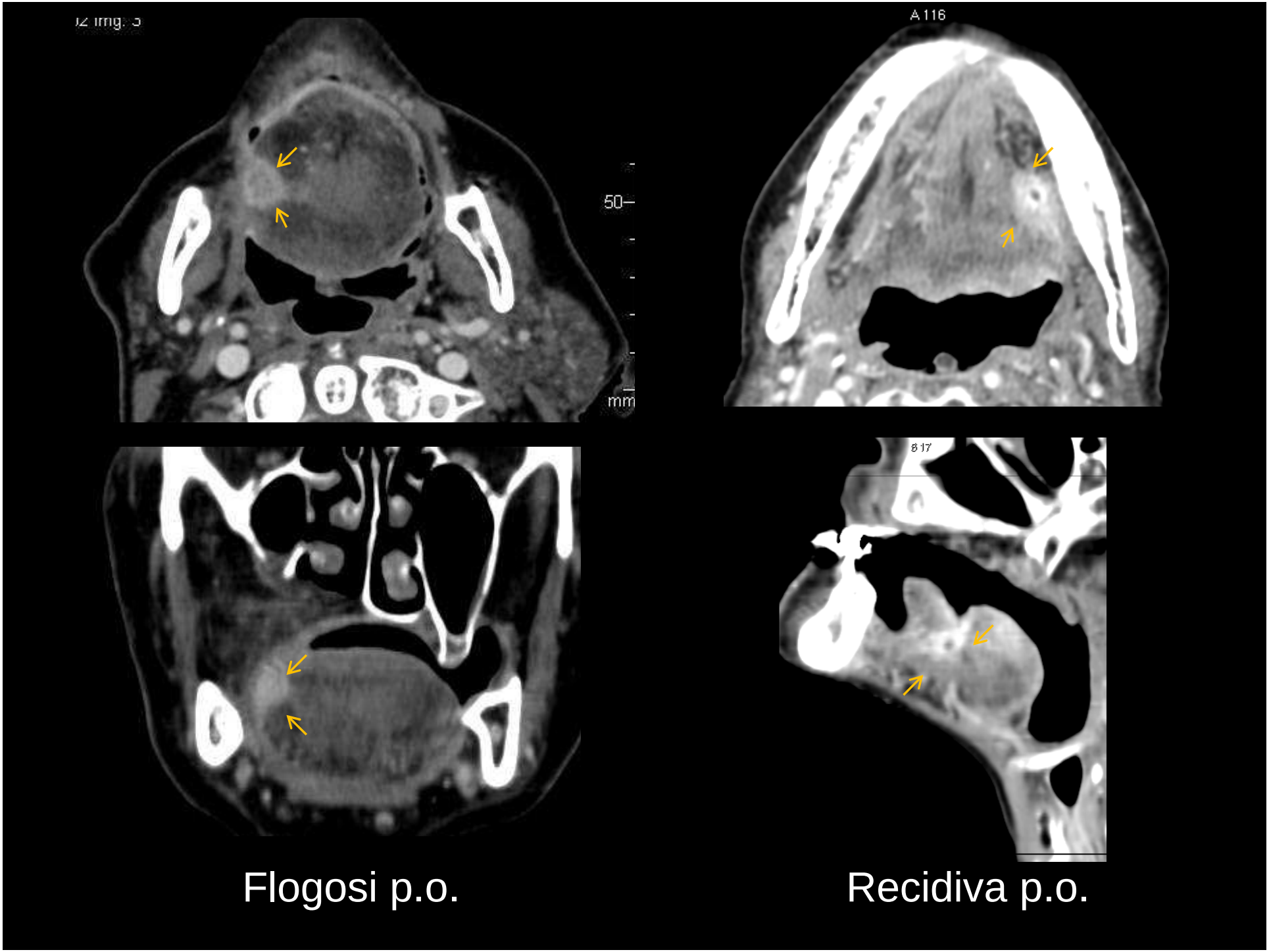
?

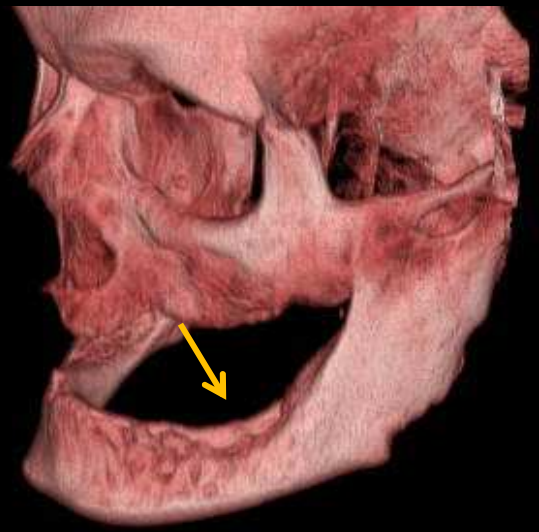



Complessità
- Anatomia normale
- Interventi chirurgici
Trattamento CT +/- RT
pre-post operatorio
o esclusivo
Anatomia distorta complessa
(↑ in caso di complicanze p.o.)
Alterazioni fibrotico-flogistiche
Difficoltà diagnostica
Persistenza di malattia o Recidiva



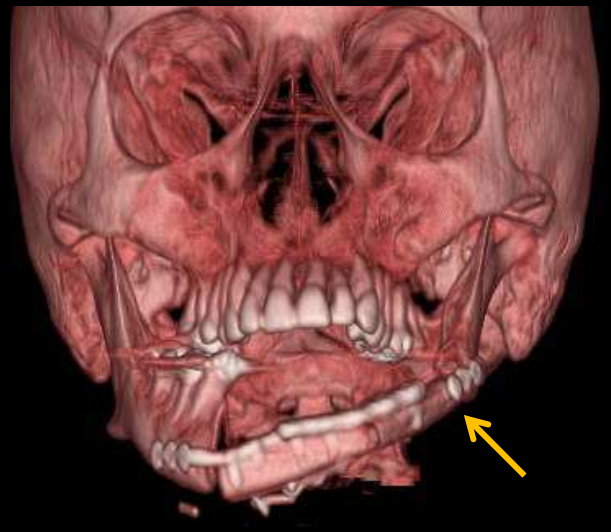
Normale controllo p.o.


A 116
50
mm
Flogosi p.o.
Recidiva p.o.





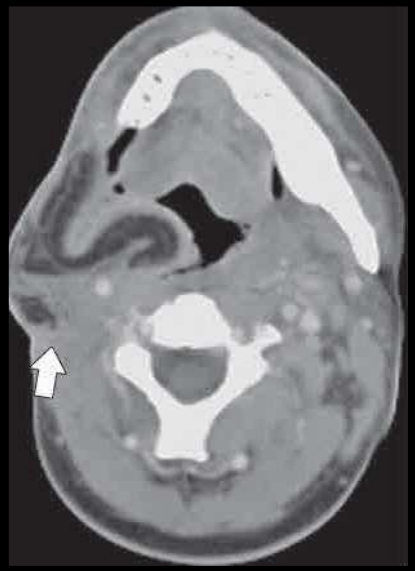
Infiltrazione ossea neoplastica

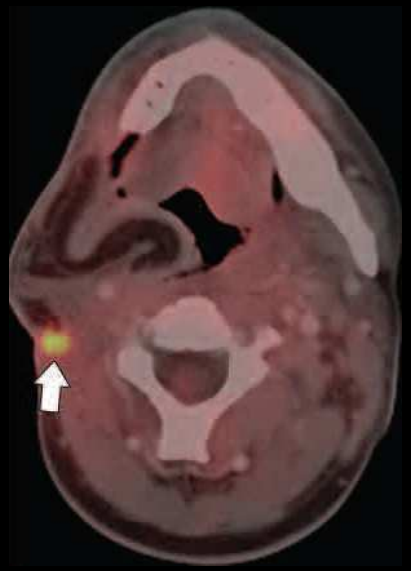




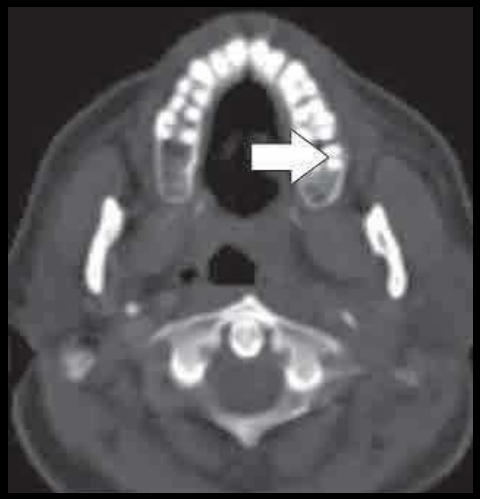
Osteomielite del lembo

Recidiva non visibile alla TC





Falso positivo alla TC-PET (ascesso)





Difficoltà diagnostica...

US-TC-RM-PET- Biopsia per dirimere dubbio diagnostico

Non sempre esiste metodica esaustiva
Dipende dal trattamento
Dalla sede del T

Non esitstono oggi chiare evidenze scientifiche
sul Timing del FU
e
sulla sequenza delle indagini diagnostiche
(costo-beneficio)

PROBLEMI DIAGNOSTICA

- INTEGRAZIONE DELLE METODICHE (TC-RMN-PET)
- STRETTA COLLABORAZIONE CON CLINICO E ANATOMO-PATOLOGO
- EXPERTISE ELEVATA (CORRELATA A FORMAZIONE E N. CASI OSSERVATI) CONCENTRATA IN POCHI CENTRI ALTAMENTE QUALIFICATI

British Journal of Cancer **104**, 1246-1248 (12 April 2011) | doi:1

Impact of multidisciplinary team management in head and neck cancer patients

P L Friedland, B Bozic, J Dewar, R Kuan, C Meyer and M Phillips

395 patients (54%) had been managed in the MDT vs 331 patients (46%) non-MDT. MDT patients were more likely to have advanced disease (likelihood ratio χ^2=44.7, P<0.001). Stage IV MDT patients had significantly improved 5-year survival compared with non-MDT patients (hazard ratio=0.69, 95% CI=0.51–0.88, P=0.004) and more synchronous chemotherapy and radiotherapy (P=0.004), and the non-MDT group had more radiotherapy as a single modality (P=0.002).

PROBLEMI LINEE-GUIDA

- LINEE GUIDA AIOM-AIRO . MANCA APPORTO DEI CHIRURGHI (SIO: 2008 CAVO ORALE - 2009 LARINGE)
- ASSENZA TERAPIE DI SUPPORTO
- VALUTAZIONE DELL'APPROPRIATEZZA NUOVE TECNICHE DI RADIOTERAPIA
- ASSENZA ASPETTI HPV
- MANCANZA INDICATORI DI MONITORAGGIO

OSPEDALI CHE CURANO

OSPEDALE	RICOVERI REGIME ORDINARIO	RICOVERI DAY OSPITAL	INTERVENTI CHIRURGICI
FONDAZIONE I.R.C.C.S. ISTITUTO NAZIONALE DEI TUMORI - MILANO (03092200)	569	48	232
SPEDALI CIVILI DI BRESCIA (03090600)	416	155	245
ISTITUTO EUROPEO DI ONCOLOGIA - IEO - MILANO (03094100)	361	155	315
POLICLINICO UNIVERSITARIO AGOSTINO GEMELLI - ROMA (12090501)	447	227	189
PRESIDIO OSPEDALIERO DI VITTORIO VENETO (05020702)	248	77	186
AZIENDA SANITARIA OSPEDALIERA SAN GIOVANNI BATTISTA (MOLINETTE) - TORINO (01090100)	237	152	165

OSPEDALI CHE CURANO

NEI PRIMI DIECI		VENTI OSPEDALI
NORD	6	11
CENTRO	2	5
SUD-ISOLE	2	4

PROBLEMI CHIRURGIA

- Mancanza di istituti di cura e di ricerca dislocati strategicamente sull'intero territorio nazionale (sono gli autentici Centri trainanti, dove di regola si effettua la chirurgia maggiormente gravata da complicanze --> chirurgia di recupero)
- Necessario introdurre un livello minimo di casi trattati/anno come controllo di qualità della chirurgia oncologica

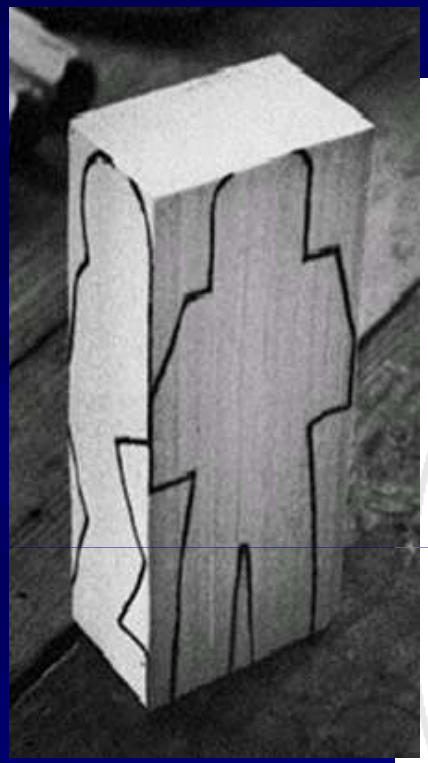
PROBLEMI CHIRURGIA

* I Centri dotati di Laser CO_2 non sempre effettuano un numero di interventi/anno che giustifichi l'expertise nello specifico settore
* La distribuzione dei Centri che effettuano ad alto livello - qualitativo e quantitativo - la chirurgia ricostruttiva microvascolare è a macchia di leopardo (forse sarebbe da ripensare nell'ottica di un paio di Centri per Regione o di un gruppo itinerante regionale di ricostruttori)
* Necessario introdurre il criterio della valutazione "terza" dei risultati funzionali

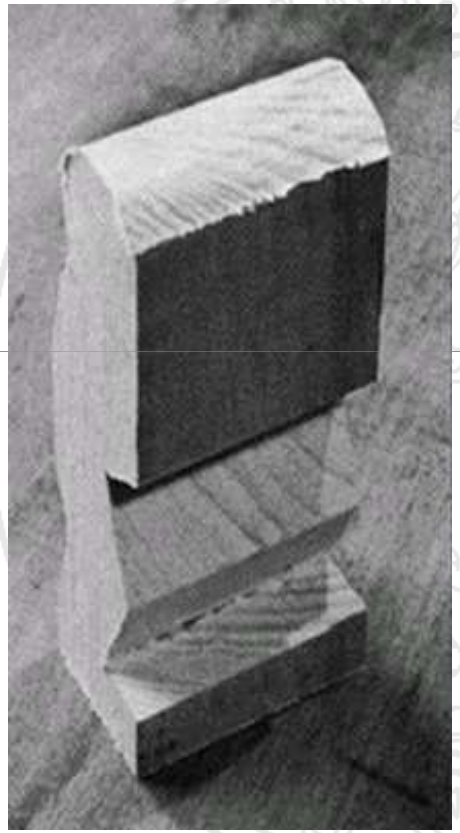
PROBLEMI CHIRURGIA

- Occorre introdurre il concetto che la chirurgia di recupero debba essere remunerata maggiormente a causa dell'elevato numero di complicanze se no, fra un po', nessun chirurgo vorrà più accollarsi l'onere di tale chirurgia
- La distribuzione dei Centri che effettuano ad alto livello la chirurgia funzionale è ancora a macchia di leopardo

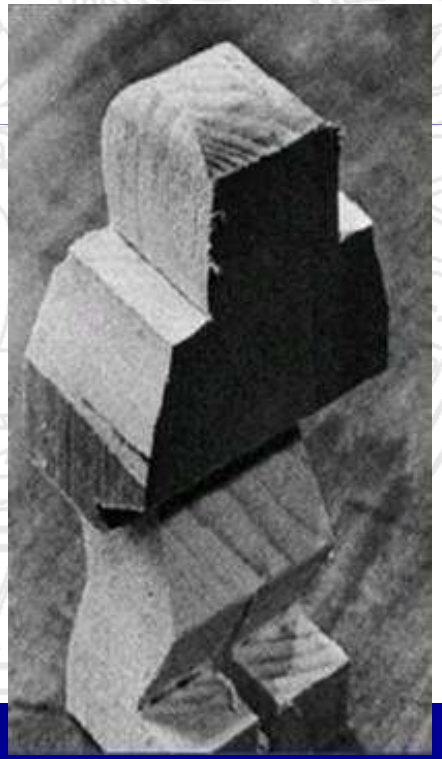
Dose “sculpting”



2-D Planning



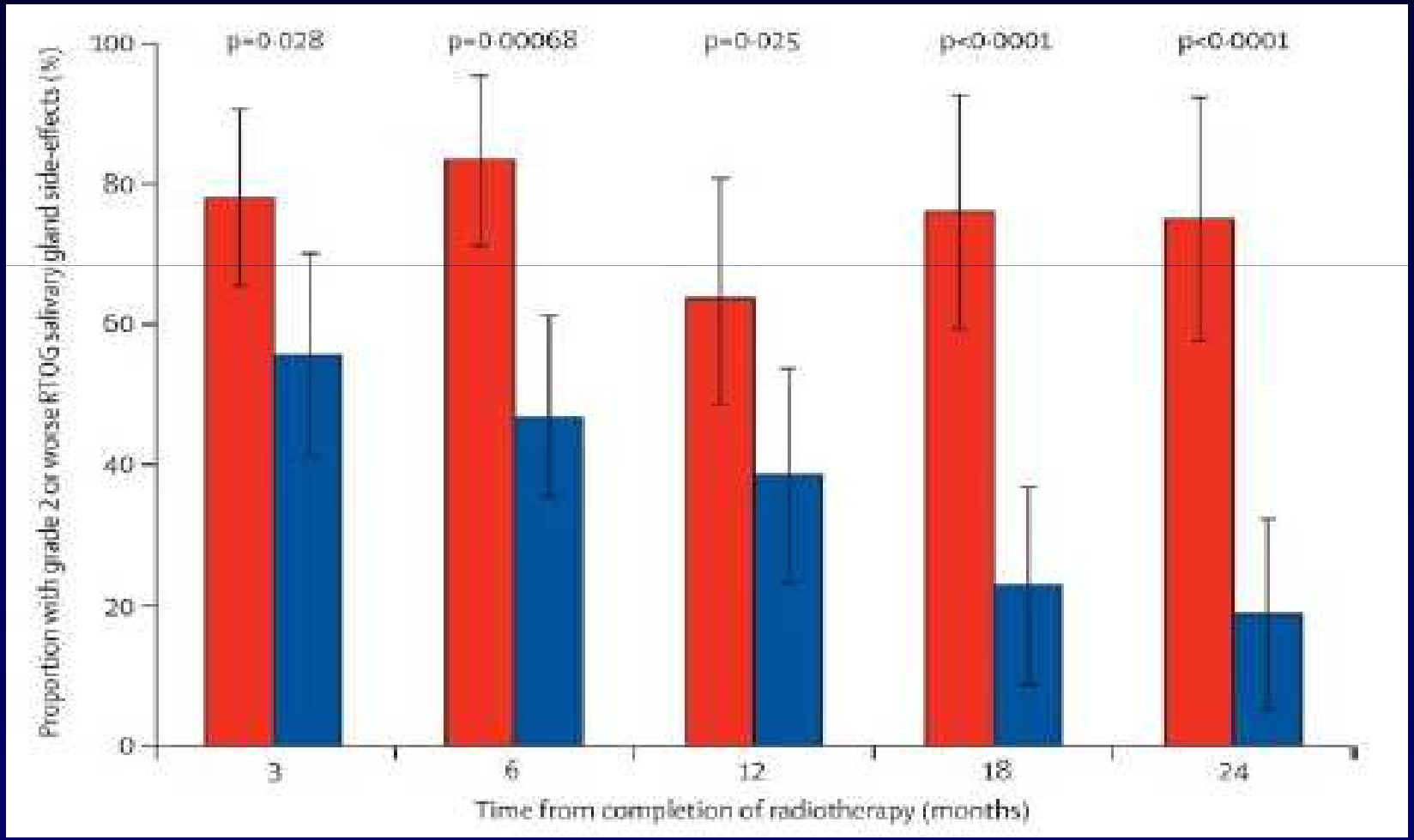
3-D Conformal



IMRT



Parotid-sparing intensity modulated versus conventional radiotherapy in head and neck cancer (PARSPORT): a phase 3 multicentre randomised controlled trial



Early stage laryngeal cancer: **carotid sparing**

Rosenthal – IJROBP 2010



Fig. 2. Stereotypic isodose plans for (a) lateral field setup and (b) intensity-modulated radiotherapy.

COGNITIVE CHANGES

Hippocampus avoidance during whole-brain RT

Gutierrez (U Wisconsin) IJROBP 2007

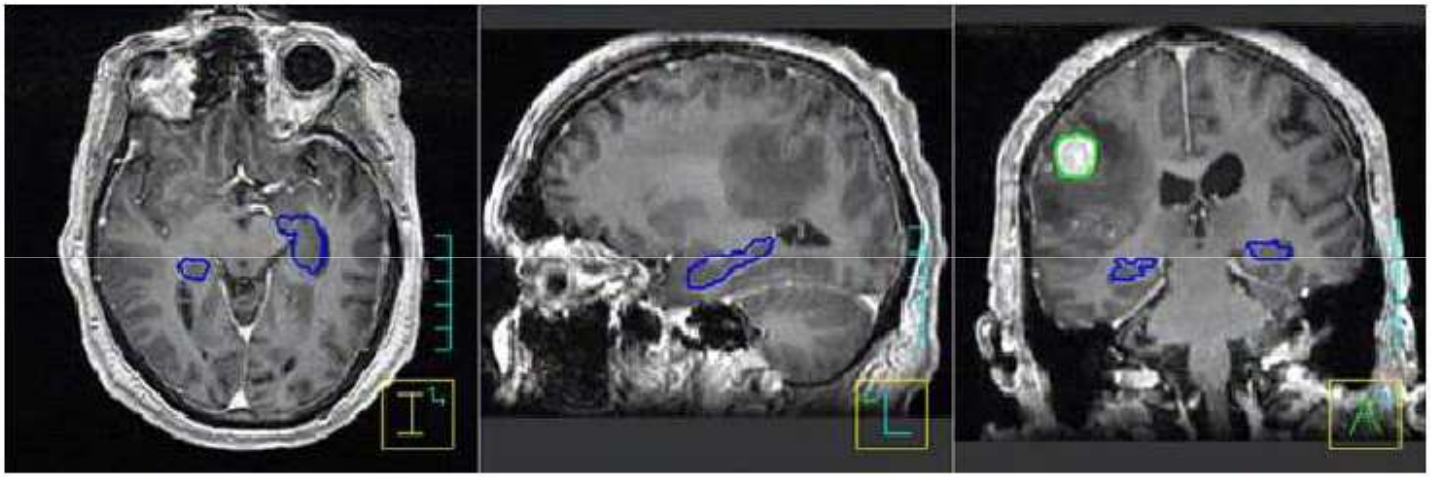
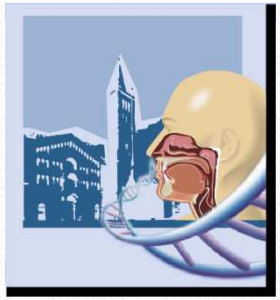
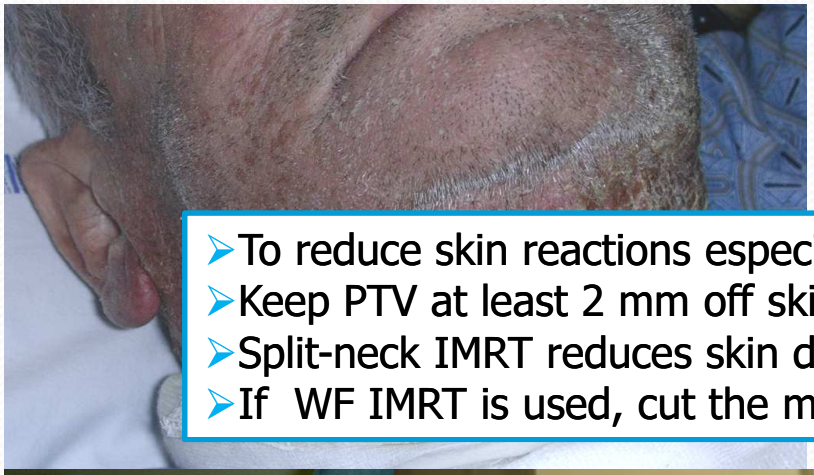


Fig. 1. Example segmentation of single brain metastasis (green) and hippocampus (blue) in a T_1-weighted three-dimensional spoiled gradient magnetic resonance image data set of 1.25-mm slice thickness.

Reduce doses to non-involved temporal lobes
Significantly higher cognitive loss in patients with V60 > 10% compared with >10%
Hsiao KY – IJROBP 2010

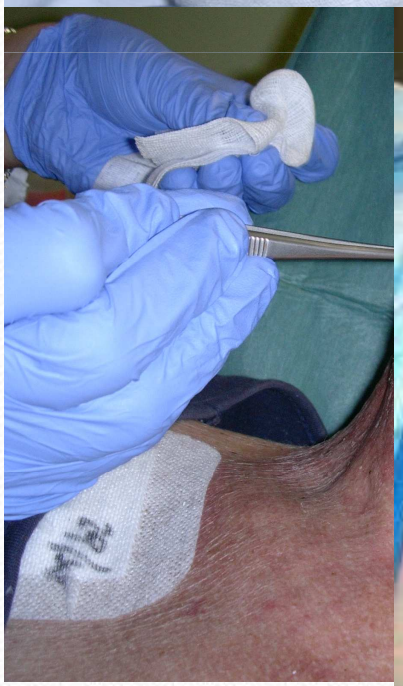


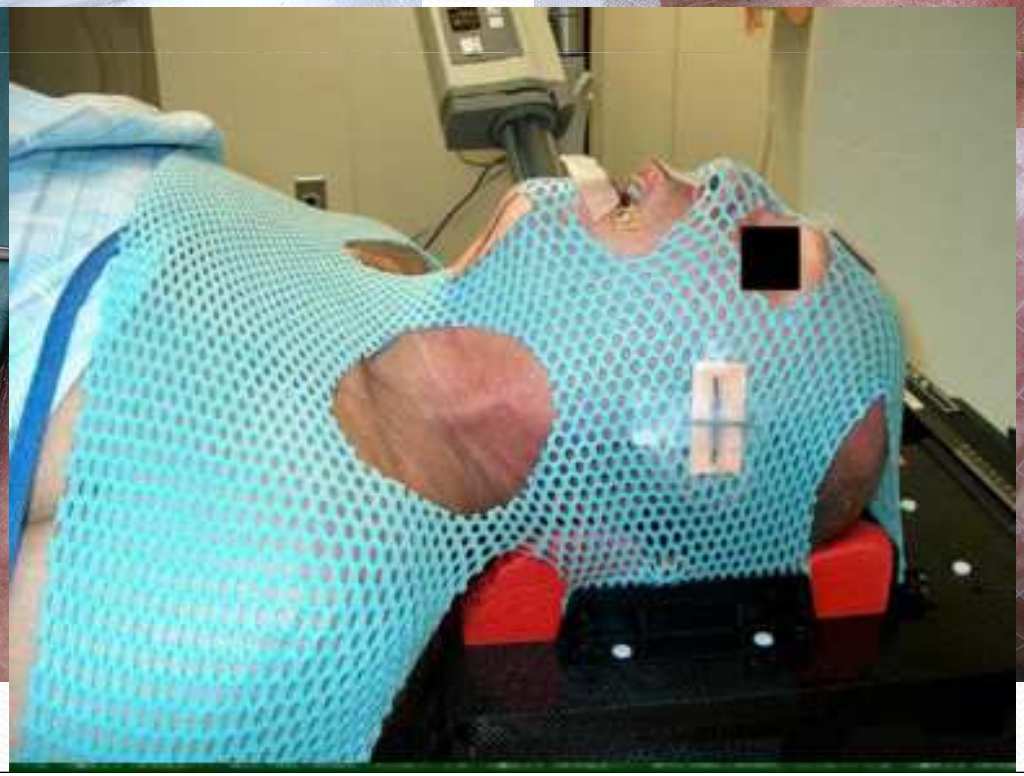
Skin Sparing





- To reduce skin reactions especially in patients receiving CETUXIMAB+IMRT
- Keep PTV at least 2 mm off skin if the skin is not target (RTOG 0920)
- Split-neck IMRT reduces skin doses in the low neck compared with WF IMRT
- If WF IMRT is used, cut the mask to prevent bolus effect







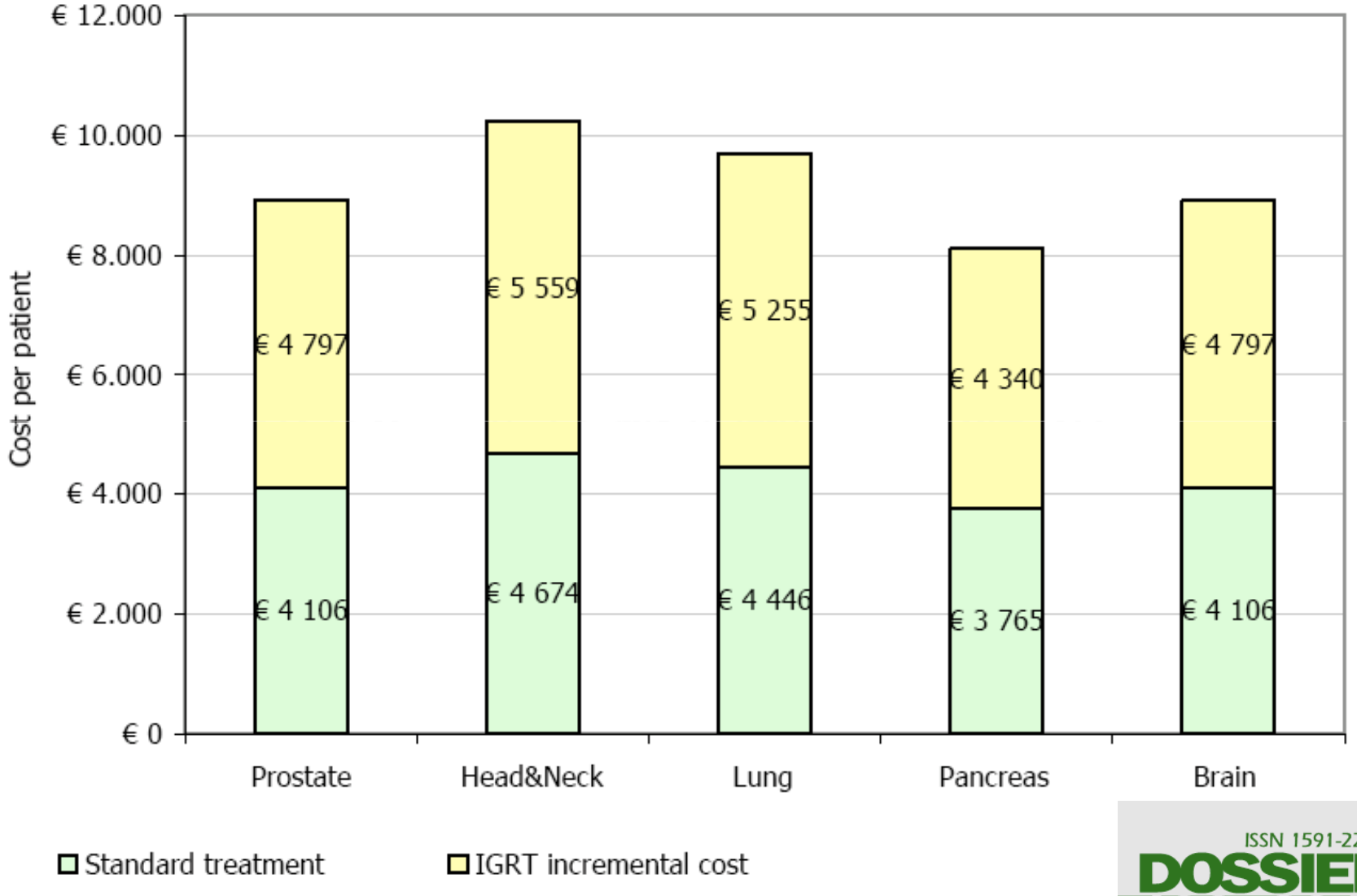
RADIOTERAPIA - NORD

	IMRT	STEREOT
• LOMBARDIA	= 6	6
• EMILIA-ROMAGNA	= 5	3
• PIEMONTE V.A.	= 5	1
• VENETO	= 3	2
• LIGURIA	= 3	2

RADIOTERAPIA – CENTRO-SUD

	IMRT	STEREOT
• LAZIO	= 5	3
• TOSCANA	= 3	2
• CAMPANIA	= 3	1
• PUGLIA	= 0	1
• SICILIA	= 0	1

Graph 7.1. Incremental expenditure of image-guided radiotherapy over standard treatment



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DOSSIER
199-2010

Cancer patients treated with radiotherapy

Cost of radiotherapy

Curative treatment	€ 6 050 (55 000 SEK)
Palliative treatment	€ 1 870 (17 000 SEK)

6% of all cancer care cost

Radiotherapy in cancer treatment

Swedish Council on Technology Assessment in Health Care, Acta Oncol 2003

Rotational IMRT

- Serial Tomotherapy
  - nomosSTAT (Best nomos)
- Helical Tomotherapy
  - Hi-Art (Tomotherapy, Inc)



- Intensity Modulated Arc Therapy (IMAT)
  - RapidArc (Varian)



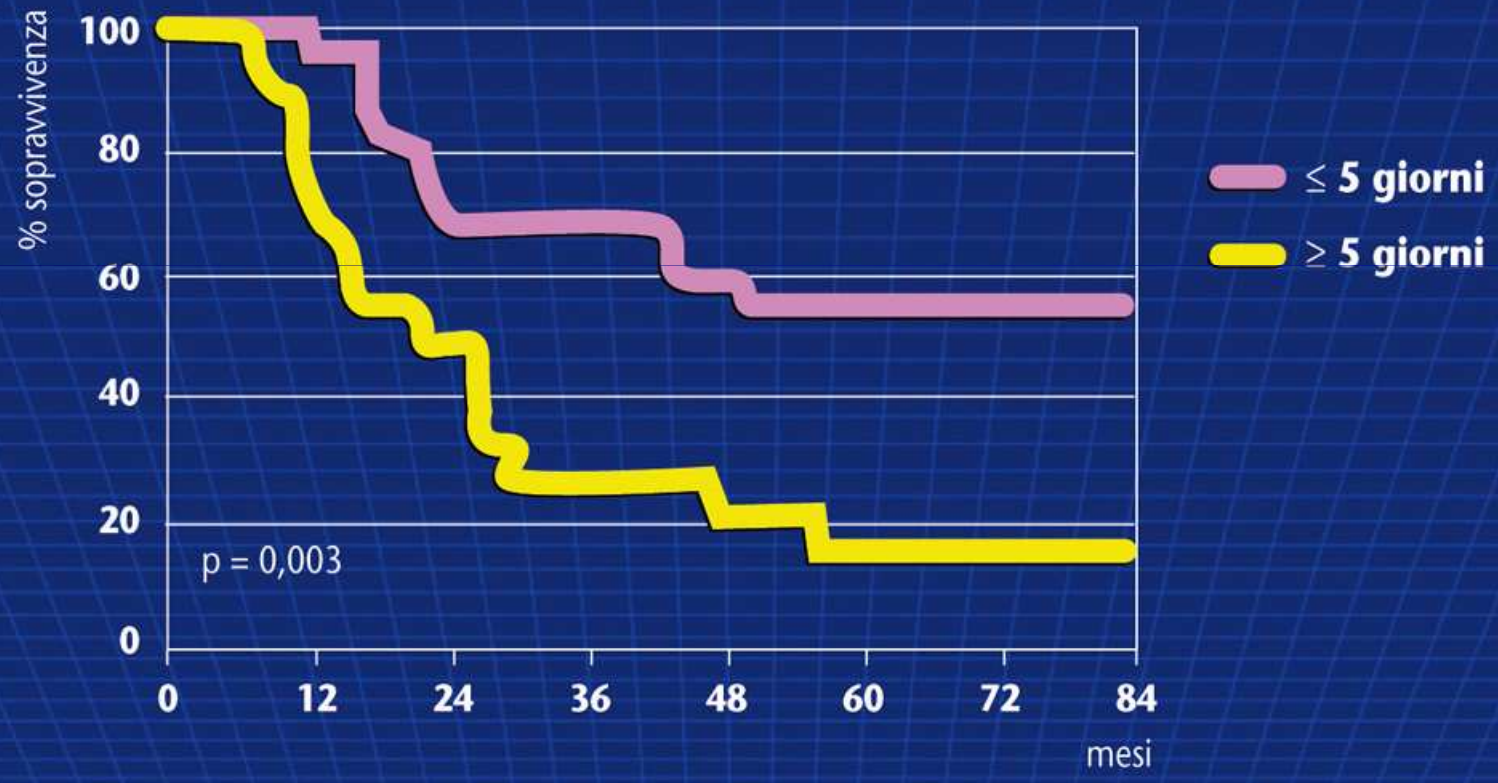
  - VMAT (Elekta)





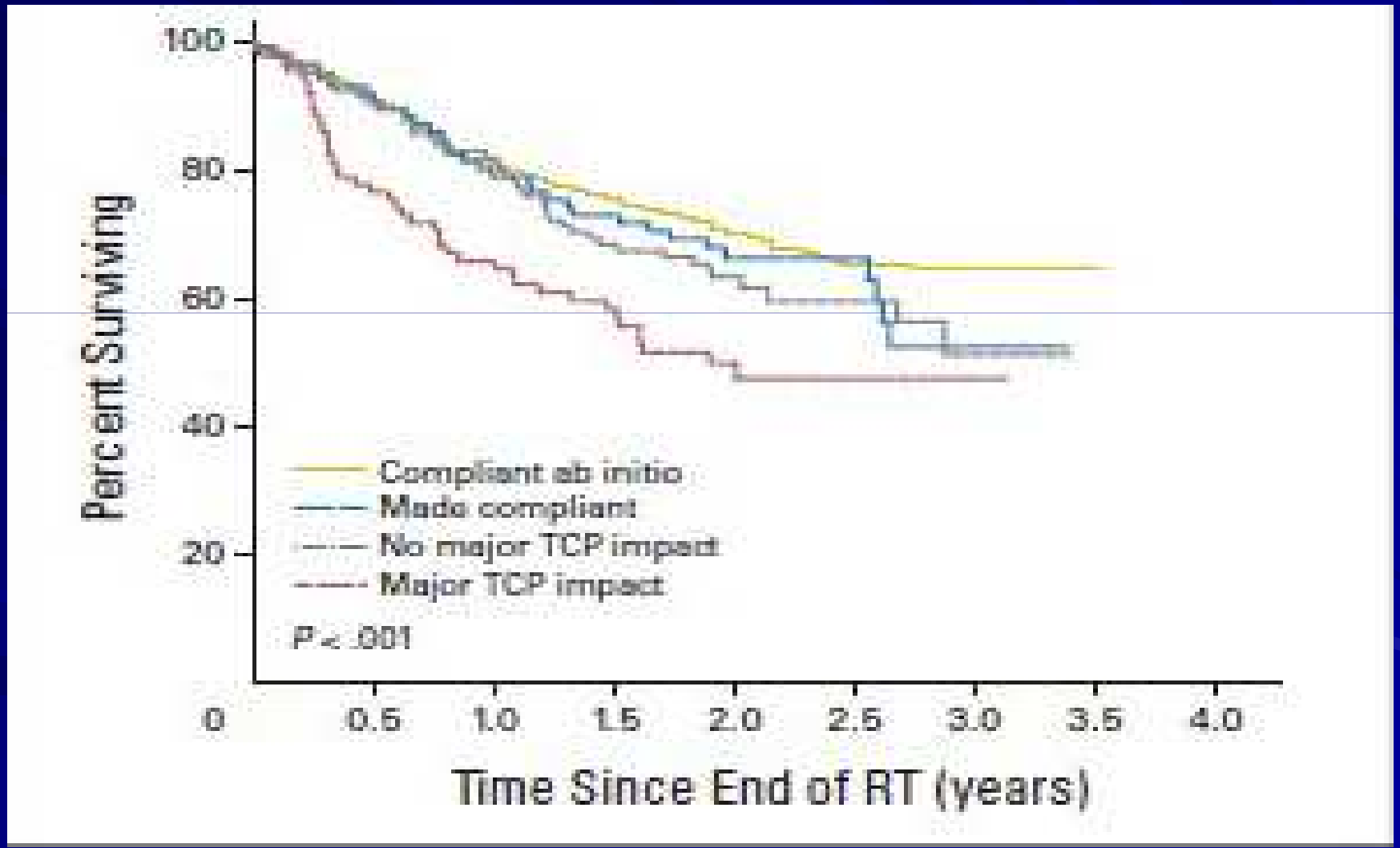
There is insufficient evidence that can be used to reliably estimate the comparative clinical effectiveness (benefit and harm), cost-effectiveness, and impact on quality of life of TomoTherapy, GKS, and CKS. The specific patient caseloads and sites requiring radiosurgery or radiotherapy may be factors to consider before buying one of these three technologies.

RT nei tumori H e N: i ritardi nel trattamento ed impatto sulla sopravvivenza



Mod. da Alden ME. et al Radiology 1996;201:675-680

QUALITA' DELLA RT



ORIGINAL ARTICLE

Completion of Radiotherapy for Local and Regional Head and Neck Cancer in Medicare

Megan Dann Fesinmeyer, PhD, MPH; Vivek Mehta, MD; Lauri Tock, MHA; David Blough, PhD; Cara McDermott, BA; Scott D. Ramsey, MD, PhD

Table 4. Proportions of Patients With Incomplete and/or Interrupted Radiotherapy

	Larynx		Nasal Cavity		Oral Cavity		Pharynx	
Treatment Category	Treated, No.	I/I, %	Treated, No.	I/I, %	Treated, No.	I/I, %	Treated, No.	I/I, %
Radiation only	1173	37.3	69	62.3	532	55.6	451	51.2
Surgery and radiotherapy	646	19.5	146	34.2	721	33.3	242	33.5
Chemotherapy and radiotherapy	155	51.6	15	60.0	144	59.7	227	58.6
Chemotherapy, surgery, and radiotherapy	34	52.9	16	37.5	60	53.3	33	51.5
All	2008	33.0	246	43.9	1457	44.9	953	48.5

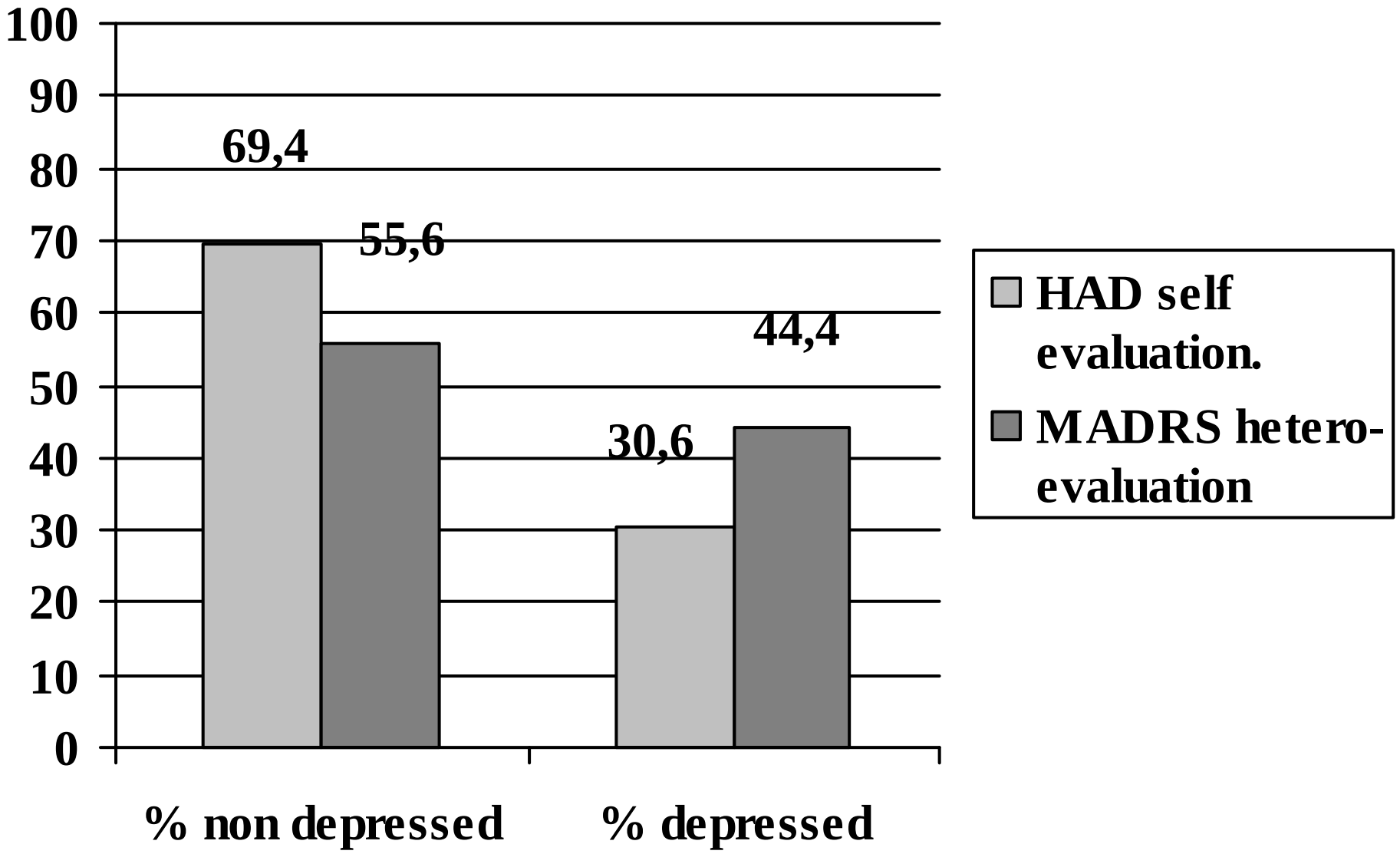
Critical Impact of Radiotherapy Protocol Compliance and Quality in the Treatment of Advanced Head and Neck Cancer: Results From TROG 02.02

Conclusion

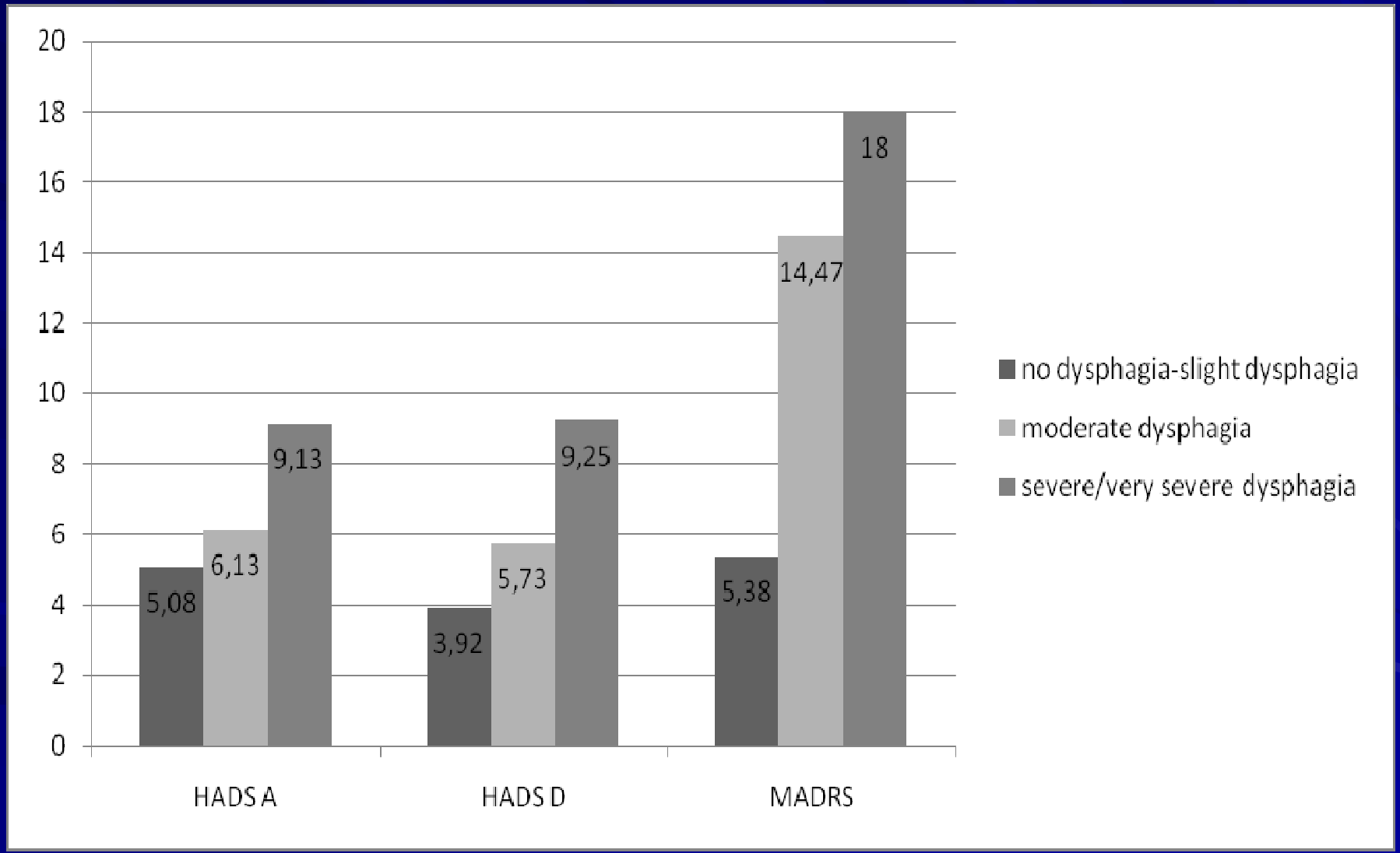
These results demonstrate the critical importance of radiotherapy quality on outcome of chemoradiotherapy in head and neck cancer. Centers treating only a few patients are the major source of quality problems.

DYSPHAGIA

	S+RT	CT+CRT
None	14%	22%
Some discomfort	22%	39%
Soft diet	42%	28%
Fluid only	11%	8%
Severe difficoulty	11%	3%


100
90
80
70
60
50
40
30
20
10
0
69,4
55,6
30,6
44,4
% non depressed
% depressed
HAD self evaluation.
MADRS hetero-evaluation

ANXIETY/DEPRESSION



PSICO-ONCOLOGIA

CENTRI NORD

- LOMBARDIA = 12
- EMILIA-ROMAGNA = 9
- PIEMONTE V.A. = 8
- VENETO = 5
- FRIULI = 3
- LIGURIA = 3
- TRENTINO = 2

CENTRI CENTRO ITALIA

- TOSCANA = 10
- MARCHE = 4
- UMBRIA = 2
- MOLISE = 1
- ABRUZZO = 1
- LAZIO = 1

PSICO-ONCOLOGIA

CENTRI SUD ED ISOLE

- SICILIA = 5
- PUGLIA = 4
- CALABRIA = 3
- CAMPANIA = 2
- SARDEGNA = 2

CONCLUSIONI

- CONCENTRARE I CASI AVANZATI IN CENTRI CHE GARANTISCONO UN EFFETTIVO APPROCCIO MULTDISCIPLINARE SU CASISTICHE CONSISTENTI
- ORGANIZZARE QUESTI CENTRI CON CRITERI LOGISTICO-TERRITORIALI CON VERIFICHE SUGLI OUTCOMES

CONCLUSIONI

- ELABORARE LINEE GUIDA DIAGNOSTICO-TERAPEUTICHE CONDIVISE DAI VARI SPECIALISTI CON CONTROLLI DI QUALITA’
- ATTENZIONE AGLI ESITI INVALIDANTI DEI TRATTAMENTI E AL LORO IMPATTO PSICO-SOCIALE
- FAVORIRE IL RECUPERO SOCIALE DEI LUNGO SOPRAVVIVENTI