

La radioterapia nel trattamento multimodale delle metastasi ossee e cerebrali

Taranto 16-17 marzo 2007



LE METASTASI OSSEE

Il parere del neurochirurgo



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INCIDENZA

- **18-20.000 nuovi casi diagnosticati ogni anno in USA.**
- **500.000 nuovi tumori diagnosticati ogni anno. Di questi il 4-5% avrà localizzazioni secondarie vertebrali.**

INCIDENZA

• PIU' FREQUENTI

polmone
mammella
prostata
rene
mieloma multiplo

• MENO FREQUENTI

tiroide
intestino
sangue

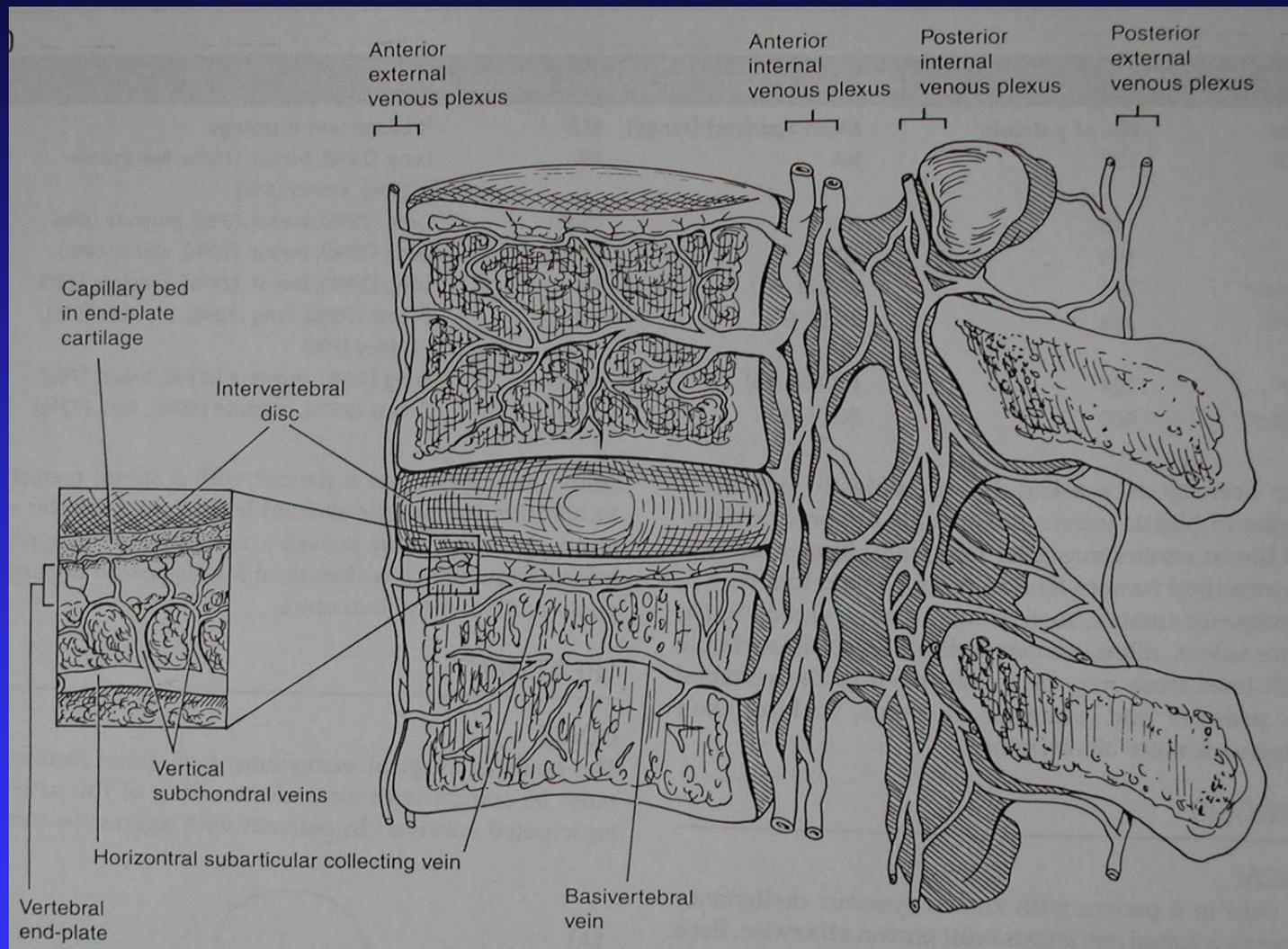
LIVELLO

La localizzazione più frequente è quella dorso-lombare.

80% casi sono mono- e bisegmentari
20% casi sono multisegmentari

PATOGENESI

- **CONTIGUITA'**
- **VIA EMATOLOGICA**



Teoria di Batson

ANATOMIA PATOLOGICA

- **OSTEOLITICI** (polmone, rene, intestino)
- **OSTEOBLASTICI** (prostata e talvolta mammella)

SINTOMATOLOGIA

- **Amielici** Dolore

- **Mielici**
 - Ipo-anestesia
 - Paraparesi
 - Tetraparesi
 - Paraplegia

INDICAZIONI

OBIETTIVO: qualità di vita

- Numero di vertebre
- Sintomatologia
- Fattori prognostici (età, condizioni generali, tipo e stadiazione)

LA NOSTRA ESPERIENZA

**Gen 1997 - Feb 2007 69 metastasi vertebrali
(10 anni) operate in 43 pz.**

23 M (54-89 età media 72 aa)

20 F (38-81 età media 62,1 aa)

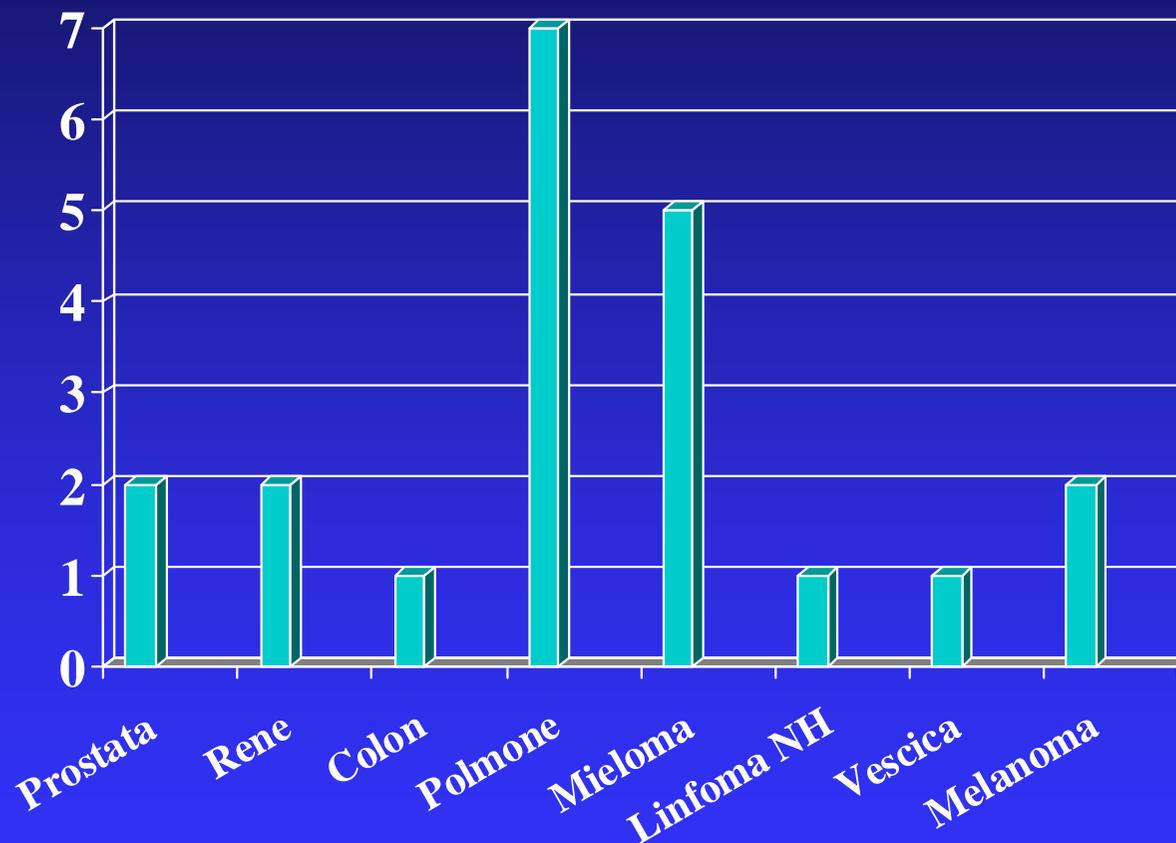
Età media 67,4

ORIGINE

7		metastasi da polmone
10	“	mammella
2	“	linfoma non Hodgkin
2	“	colon
2	“	rene
2	“	prostata
2	“	melanoma
1	“	tiroide
1	“	vescica
1	“	ovaio
10	“	mieloma multiplo

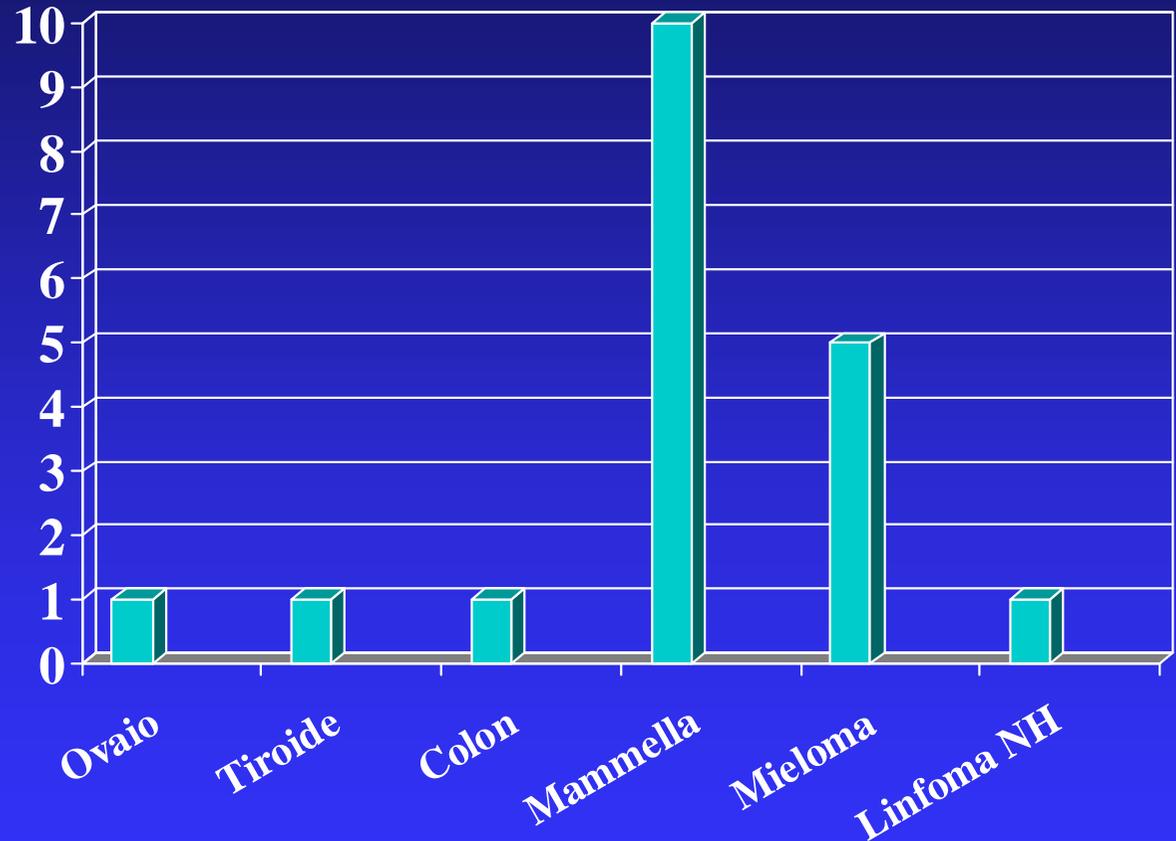
MASCHI

- 7 metastasi da polmone
- 1 “ linfoma NH
- 1 “ colon
- 2 “ rene
- “ prostata
- 2 “ melanoma
- 1 “ vescica
- 5 “ mieloma multiplo

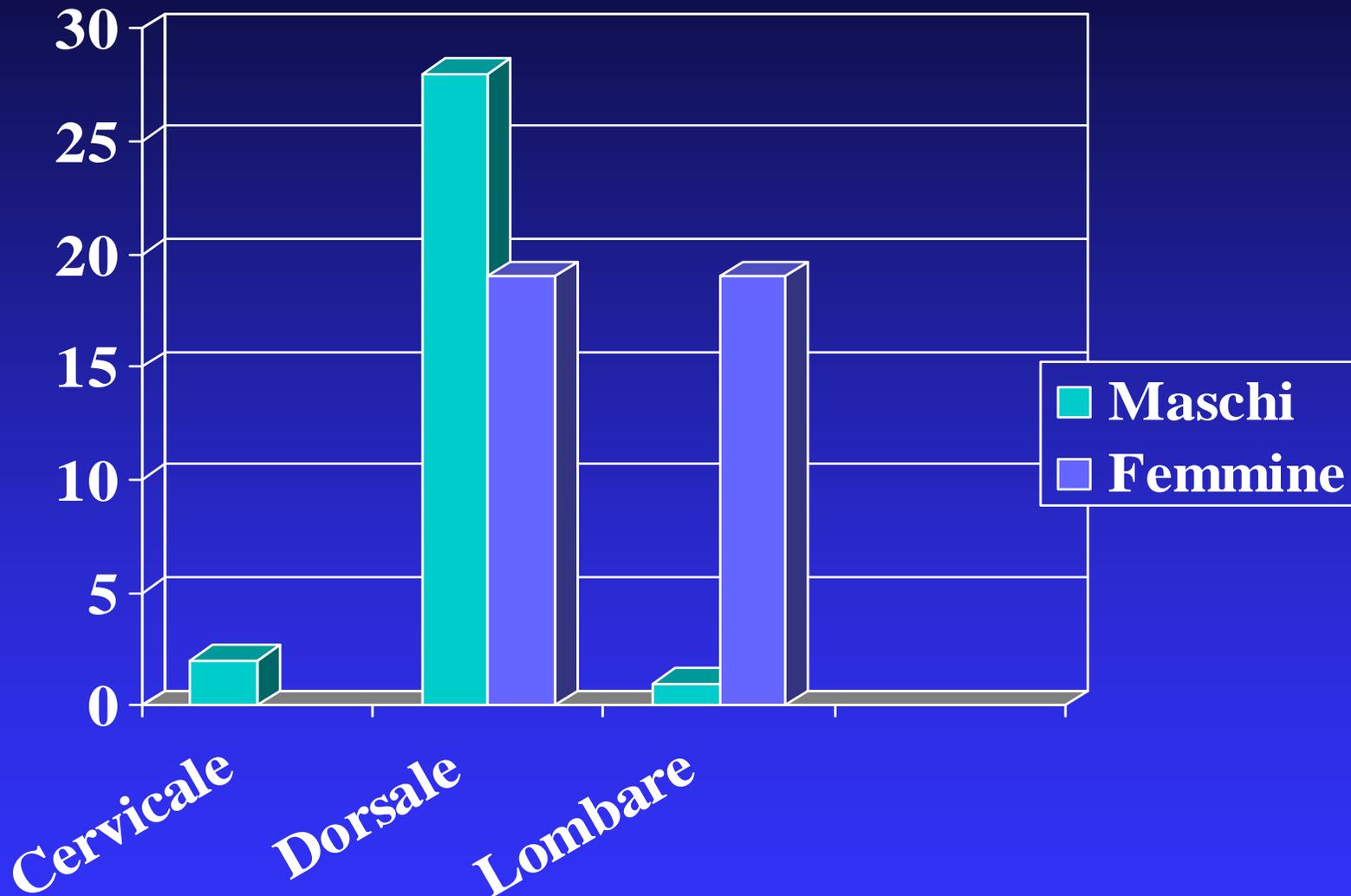


FEMMINE

10 metastasi mammella
1 “ linfoma NH
1 “ colon
1 “ tiroide
1 “ ovaio
5 “ mieloma multiplo



LIVELLO

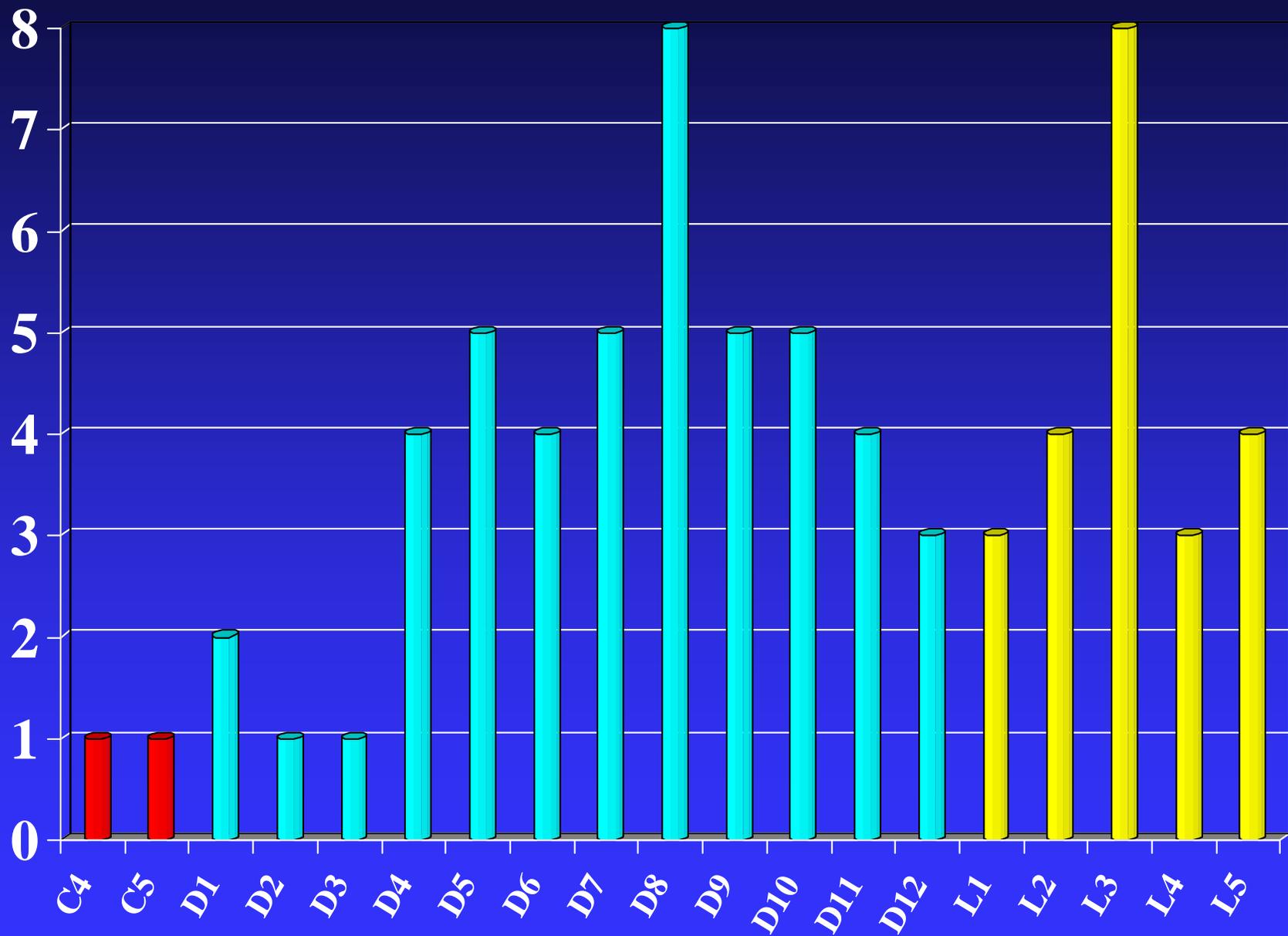


Cervicale 2 vertebre

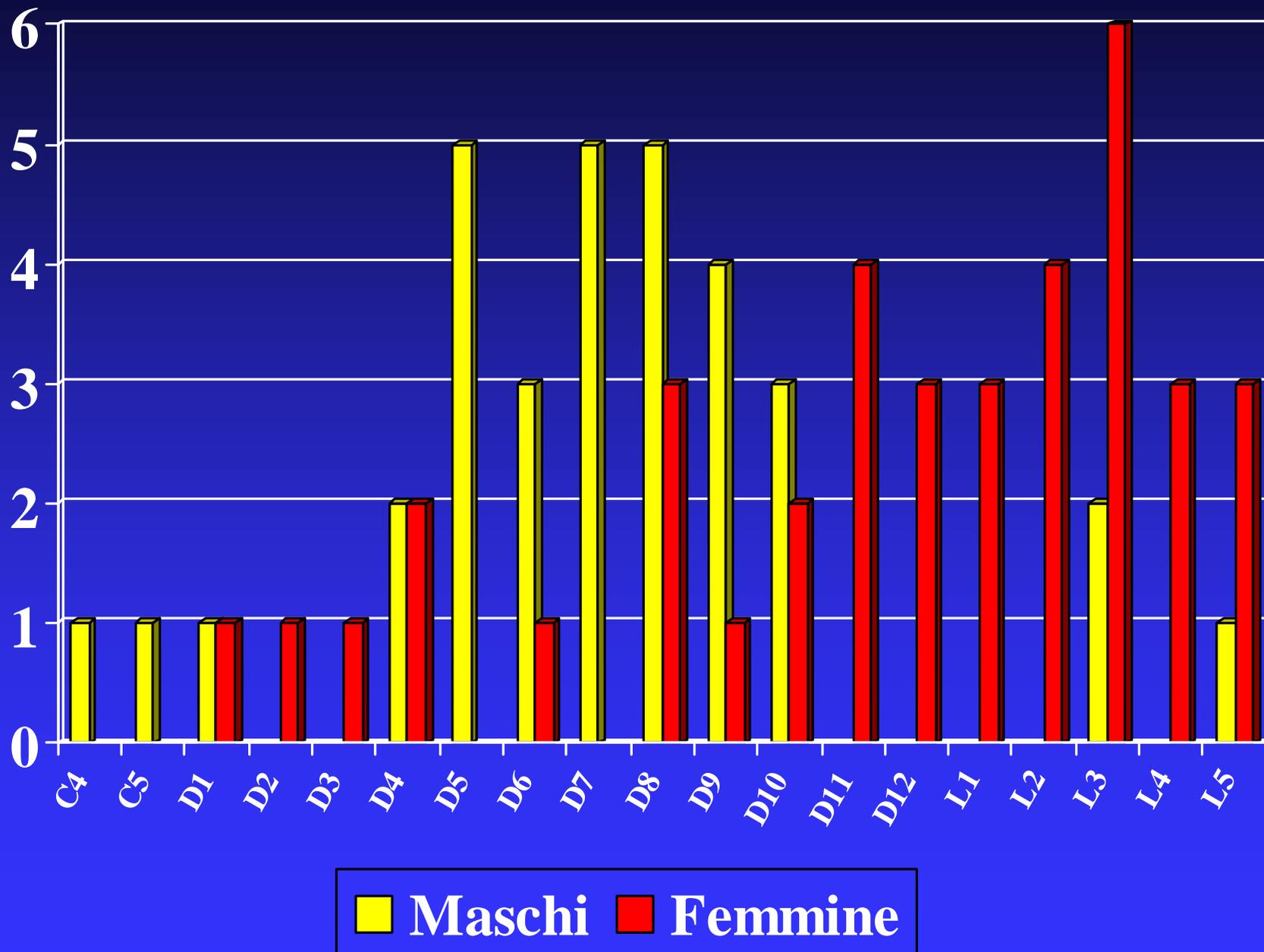
Dorsale 47 vertebre (28M-19F)

Lombare 20 vertebre (1M-19F)

VERTEBRE TRATTATE

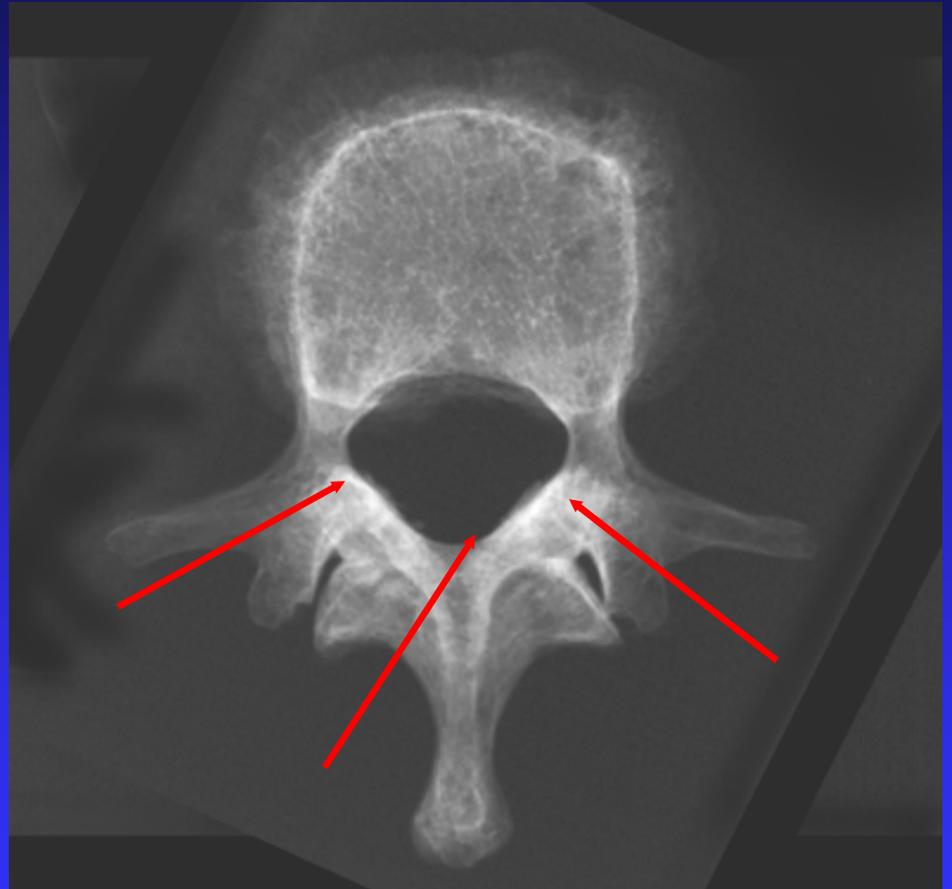
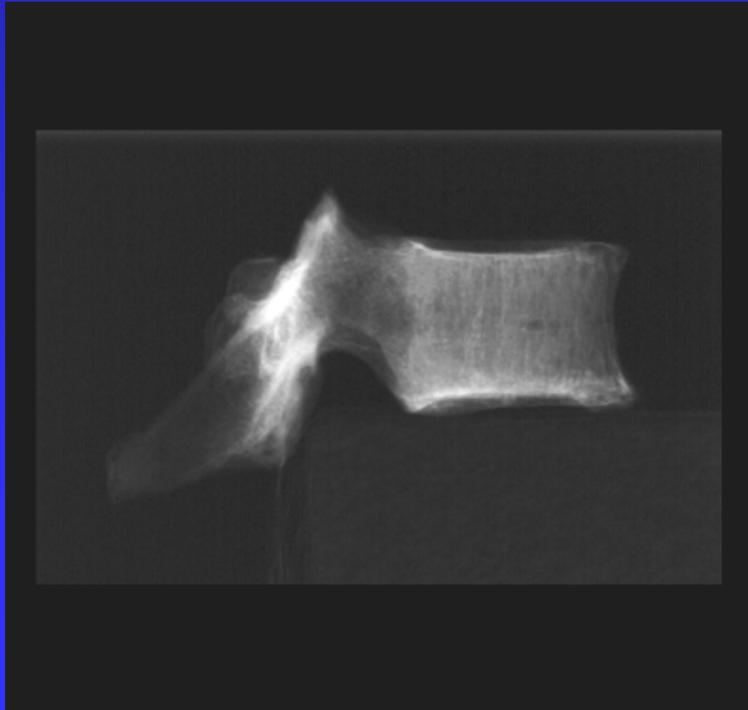
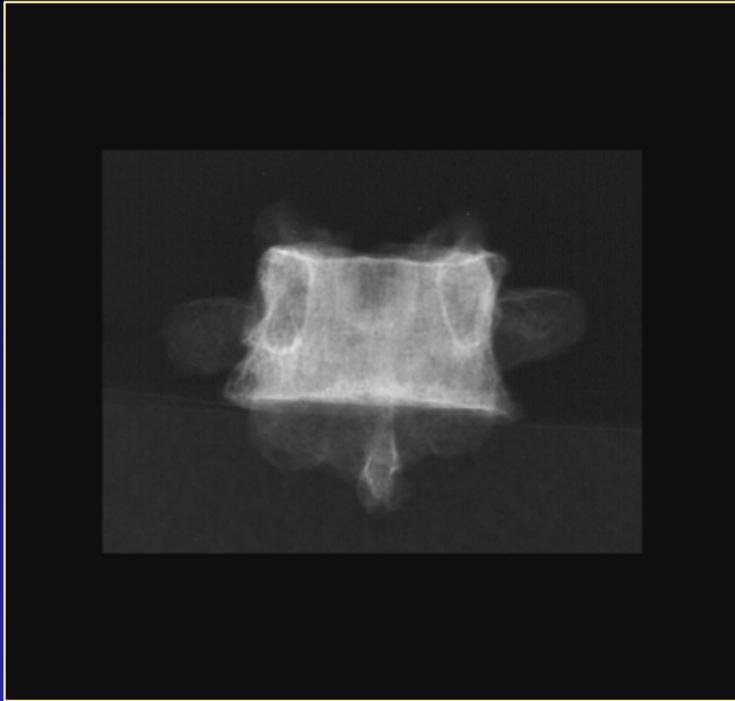


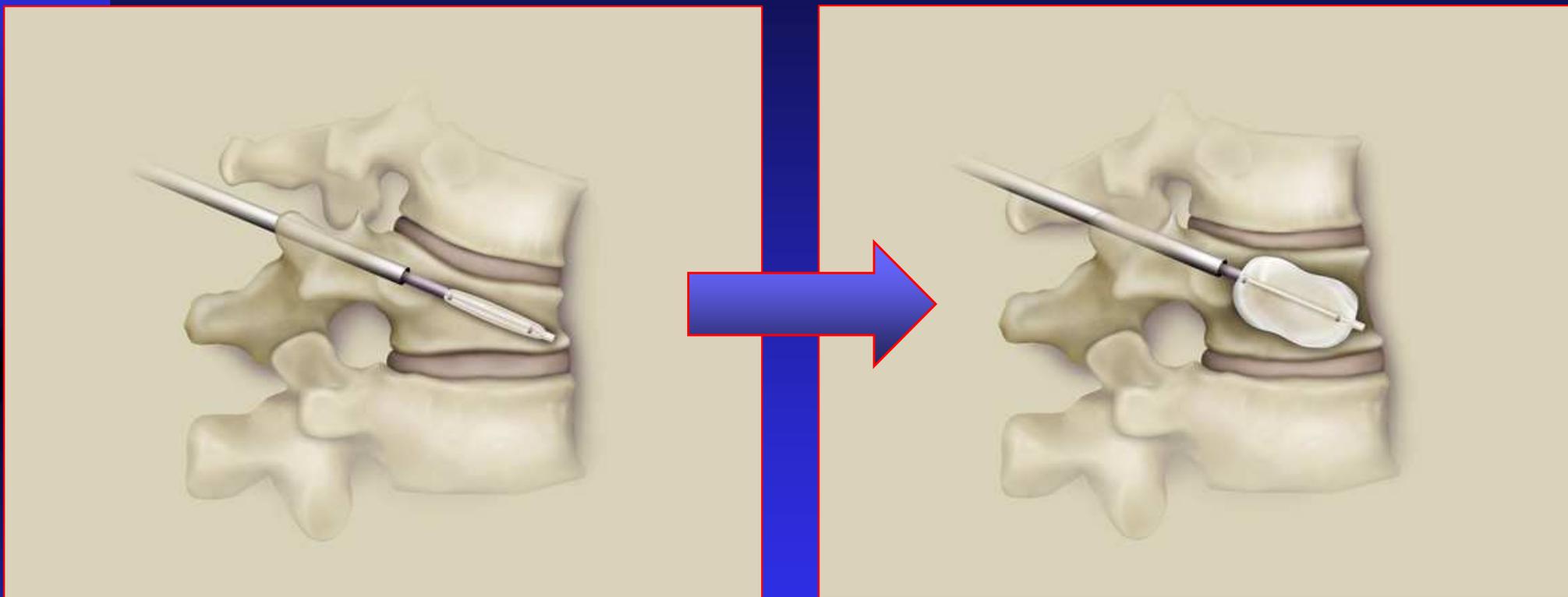
VERTEBRE TRATTATE



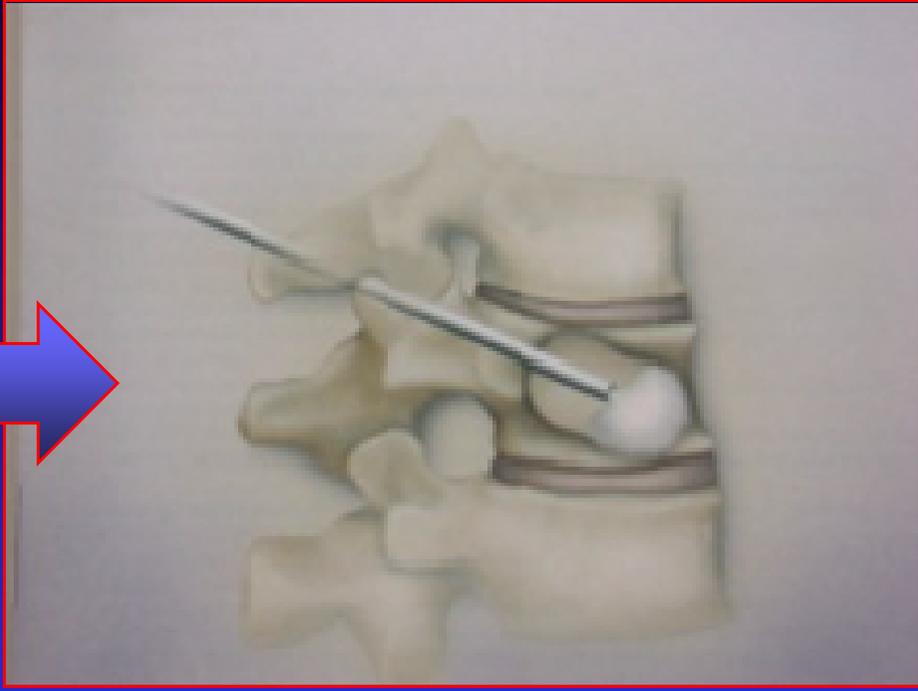
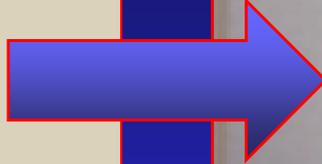
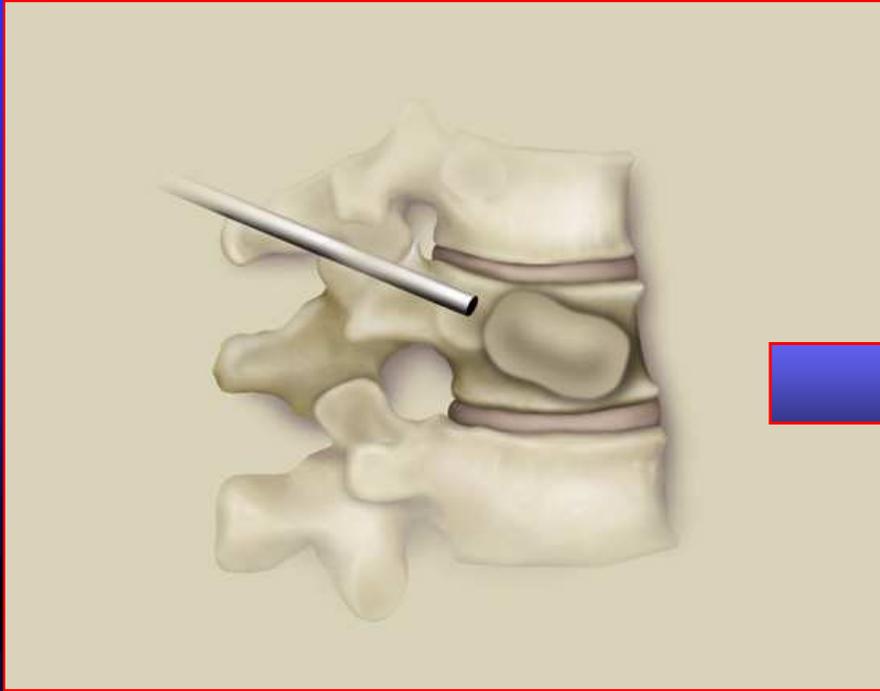
TRATTAMENTO

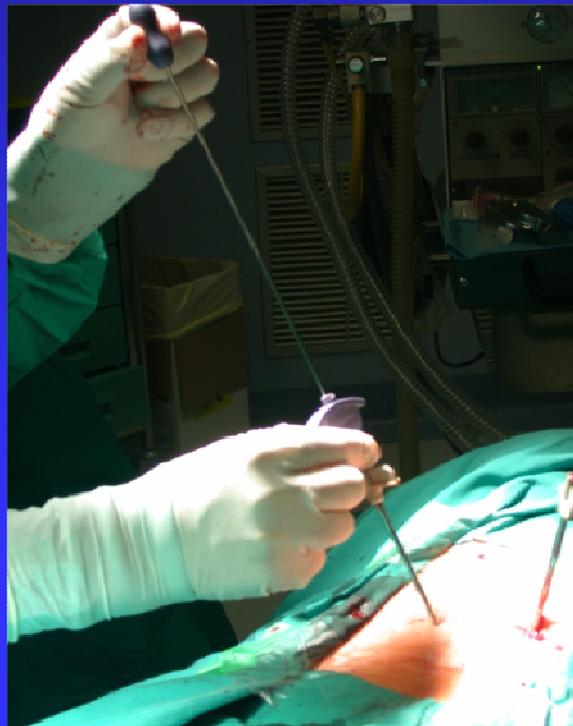
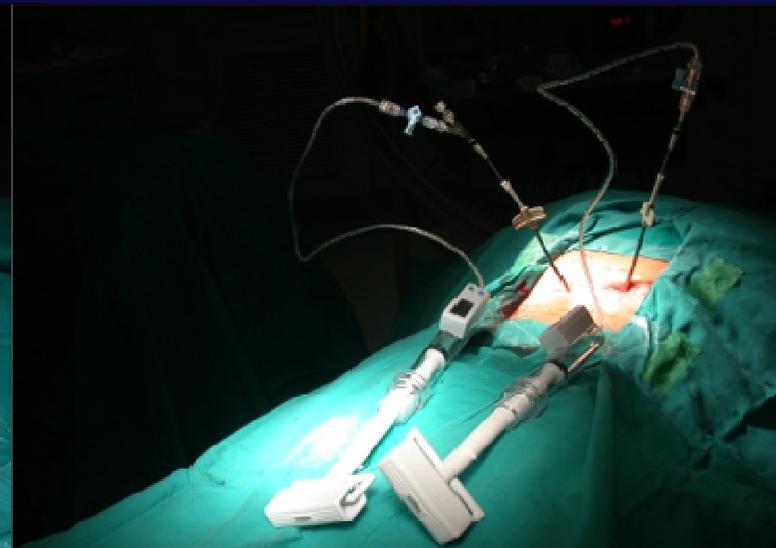
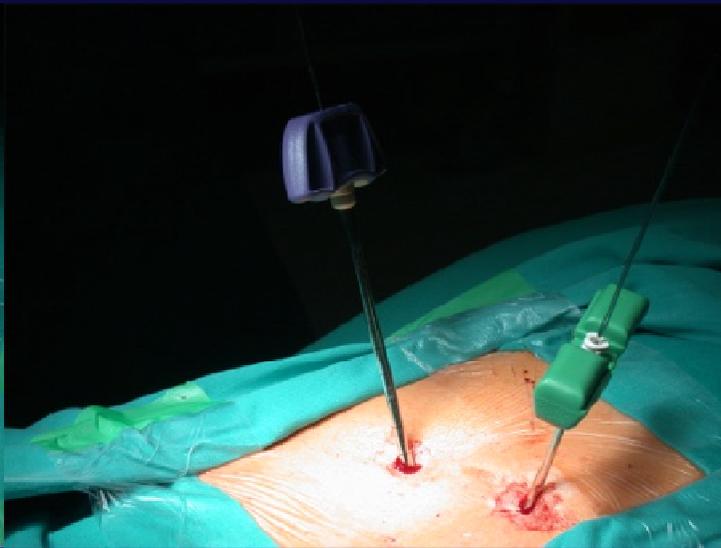
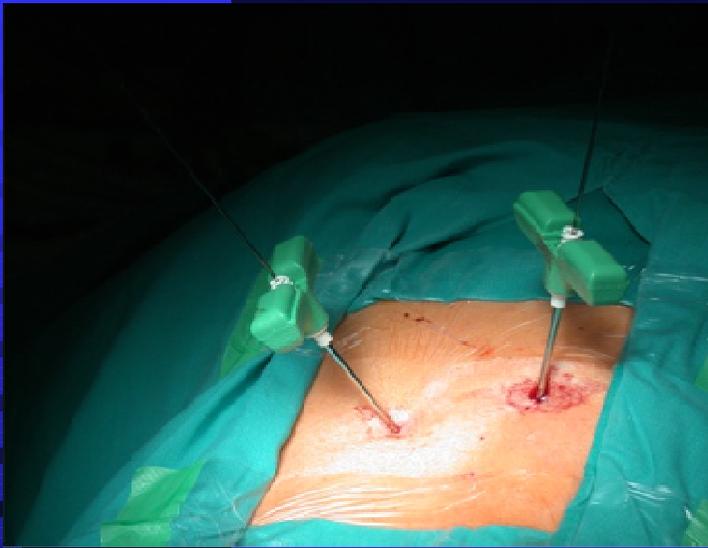
- ✓ Laminectomia 10 pz (7M-3F)
 - bilaterale 7 (6M-1F)
 - monolaterale 3(1M-2F)
- ✓ Laminectomia + vertebroplastica 2F
- ✓ Laminectomia monolaterale + cifoplastica 10 pz (9M-1F)
- ✓ Cifoplastica 16 pz (3M-13F)
- ✓ Somatectomia + cifoplastica 2 pz (1M-1F)
- ✓ Somatectomia + protesi distraibile ADD plus 1M





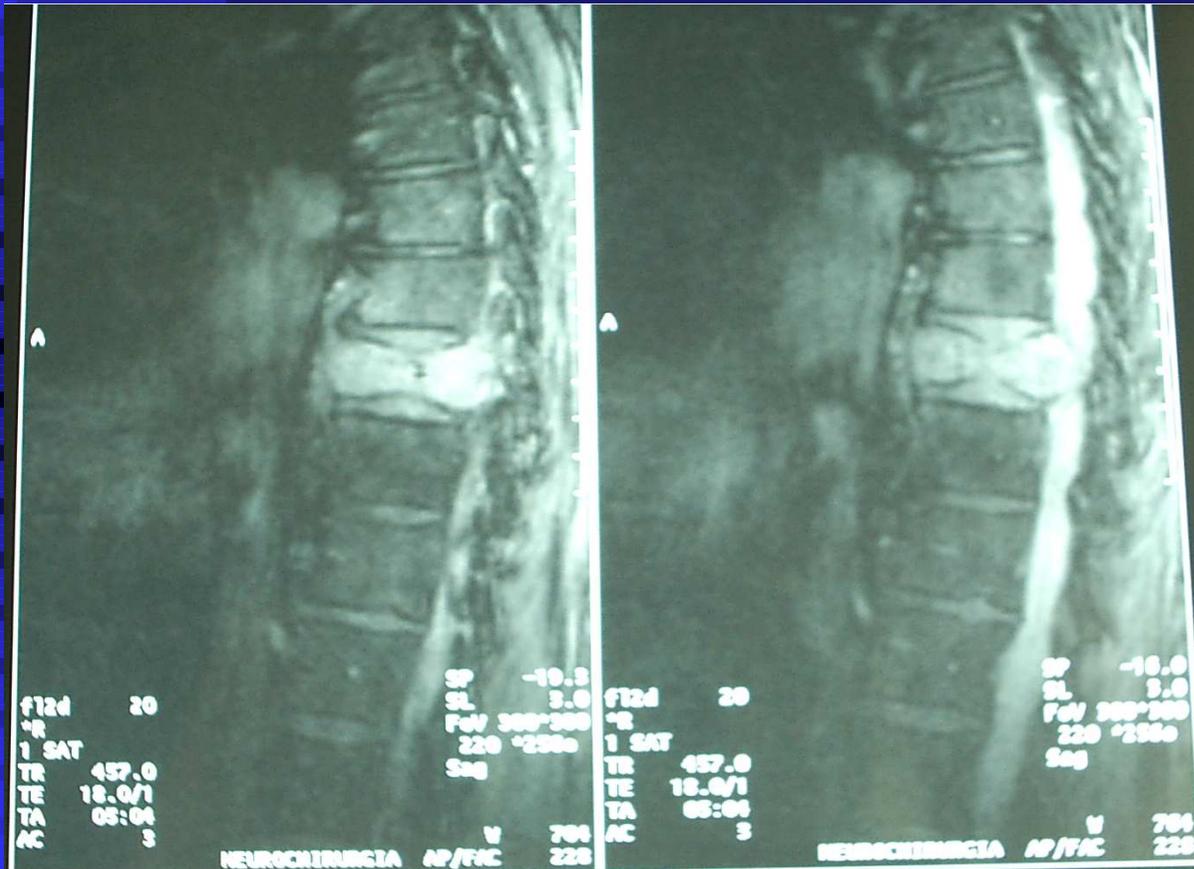
CIFOPLASTICA



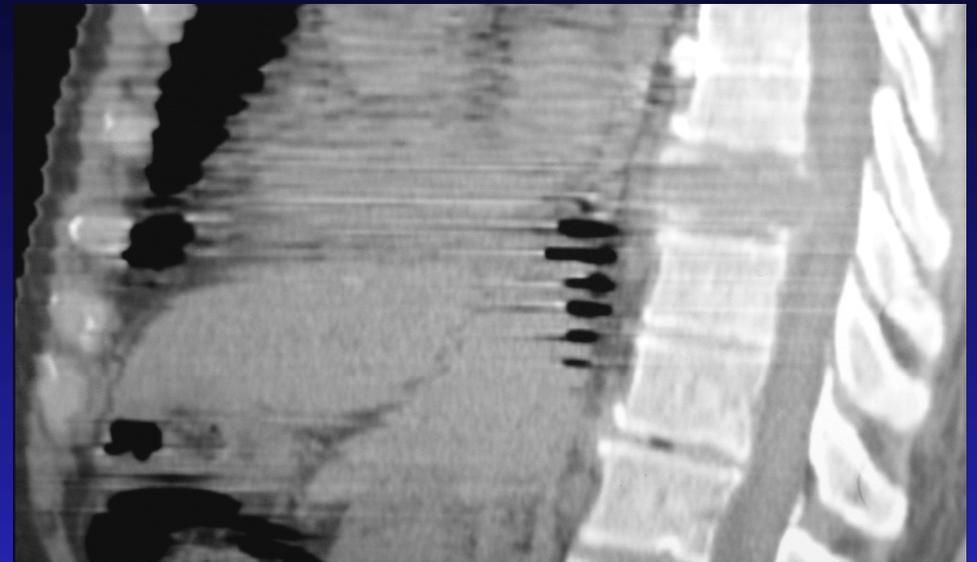
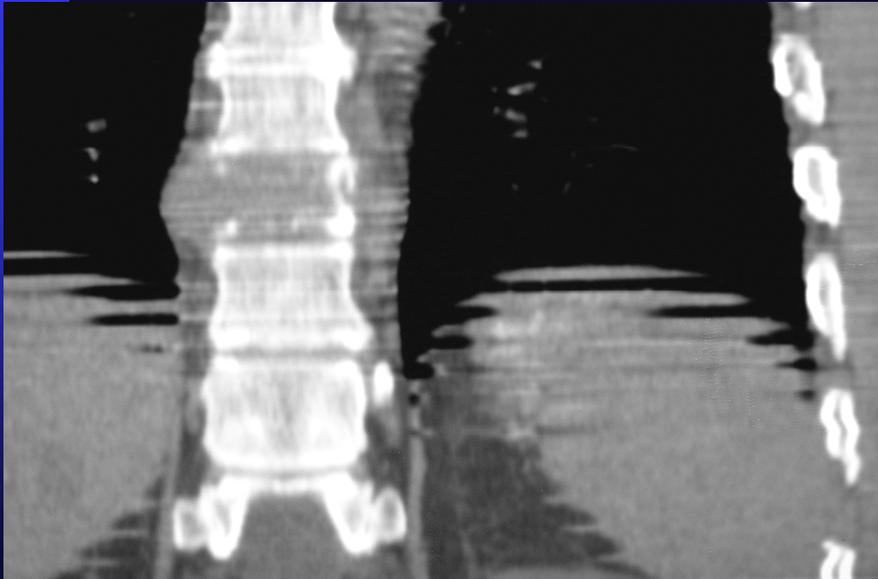


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Uomo 60 aa - metastasi ossea di D9 da oncocitoma renale. Intensa dorsalgia.



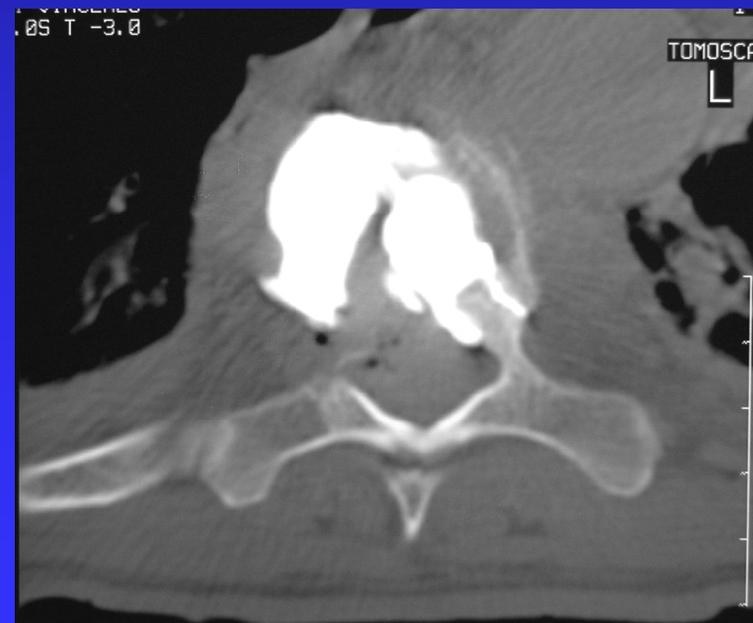
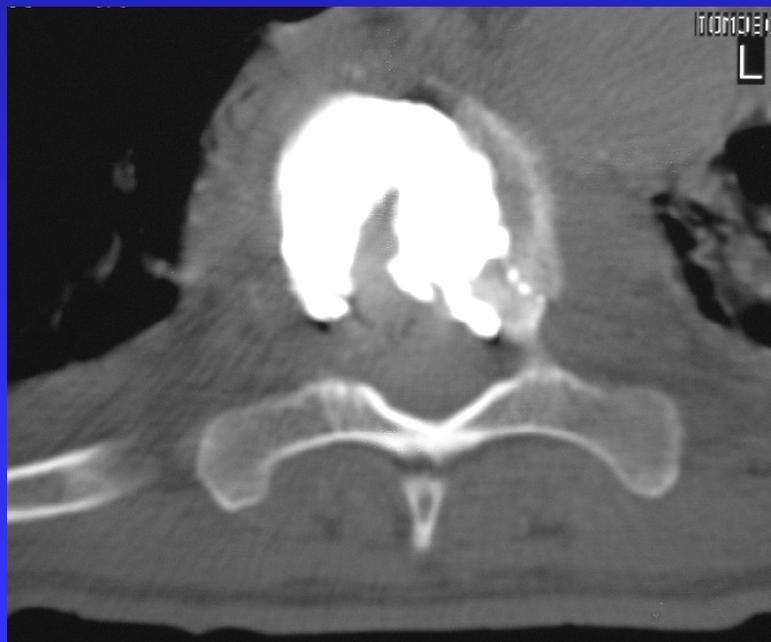
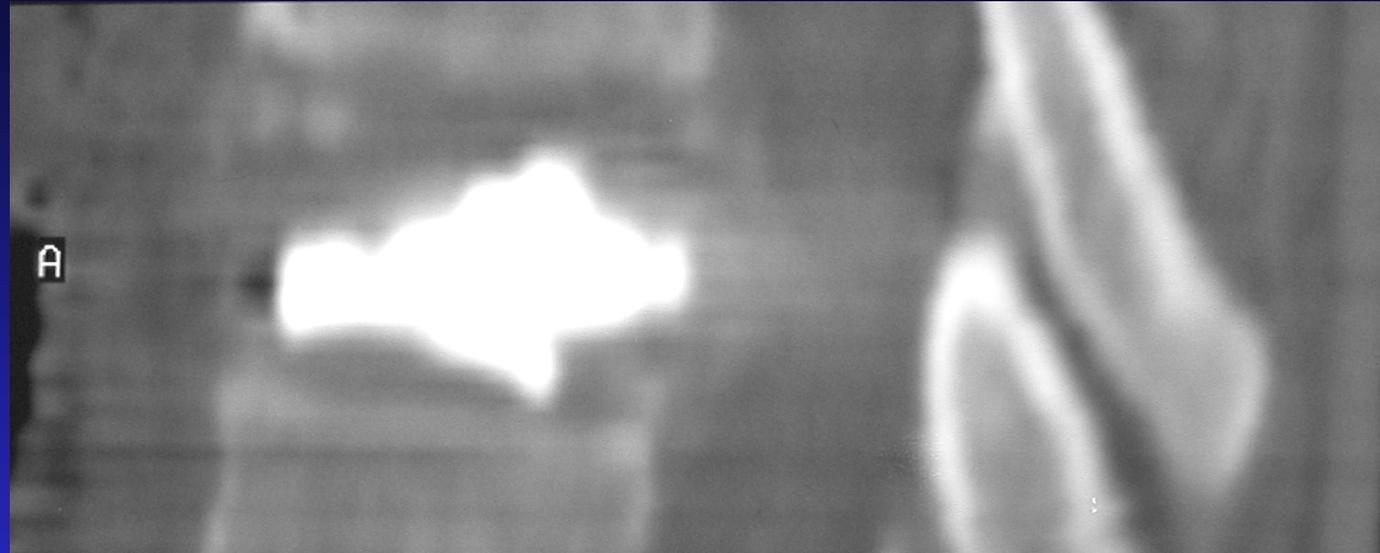
RMN pre-operatoria



TAC pre-operatoria



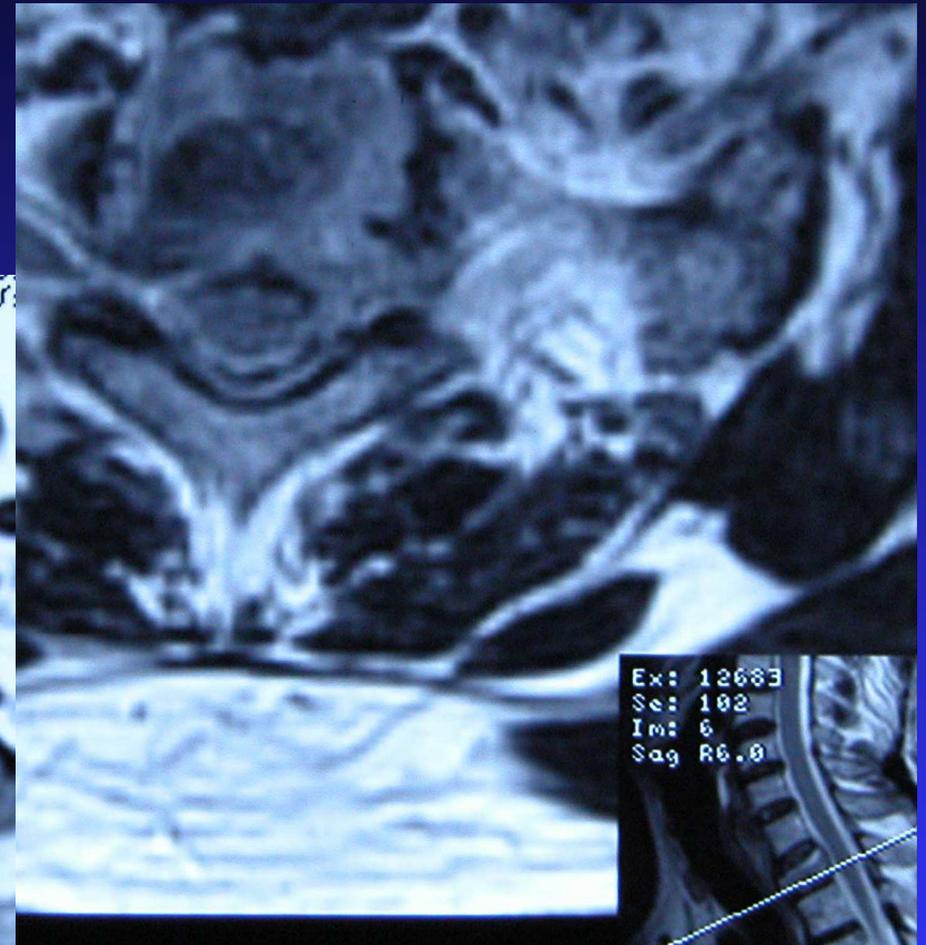
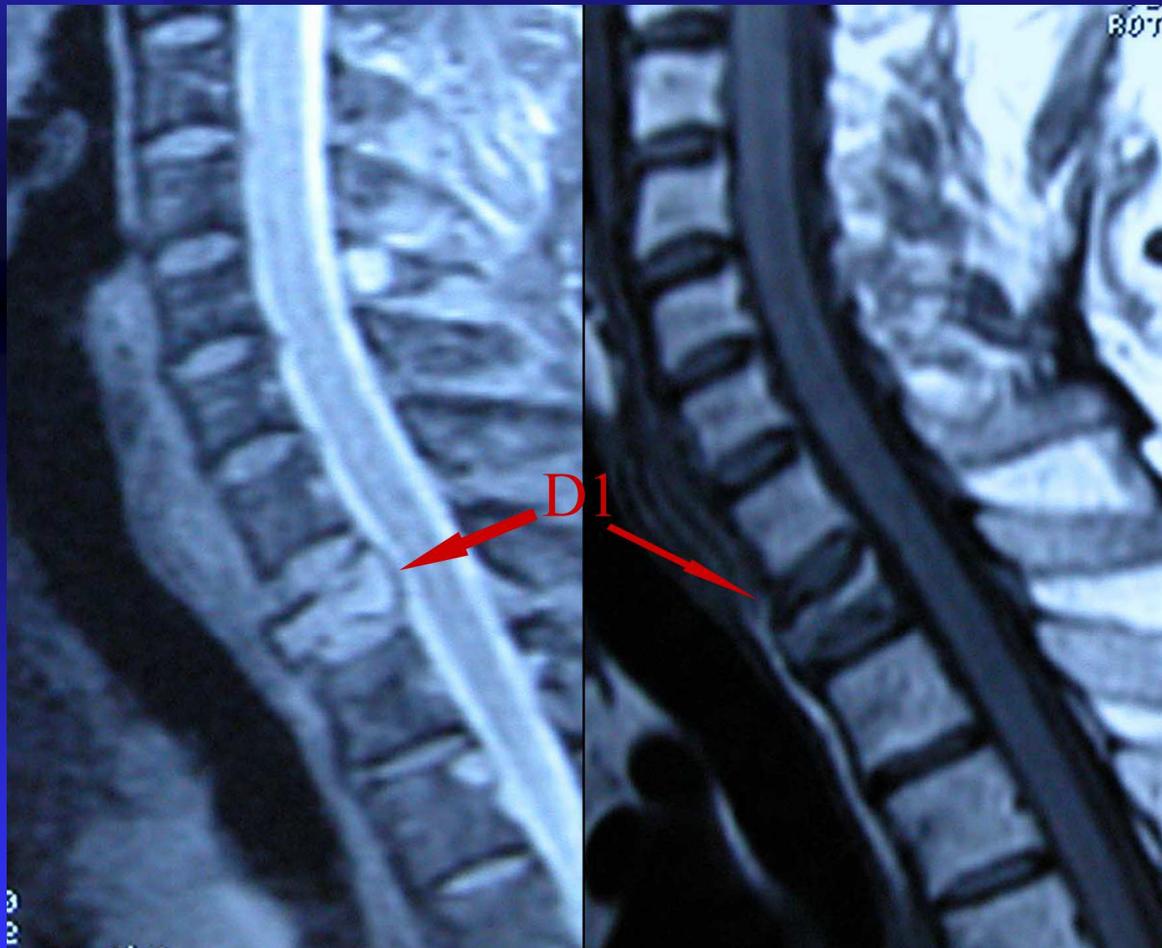
Cifoplastica



TAC post-operatoria

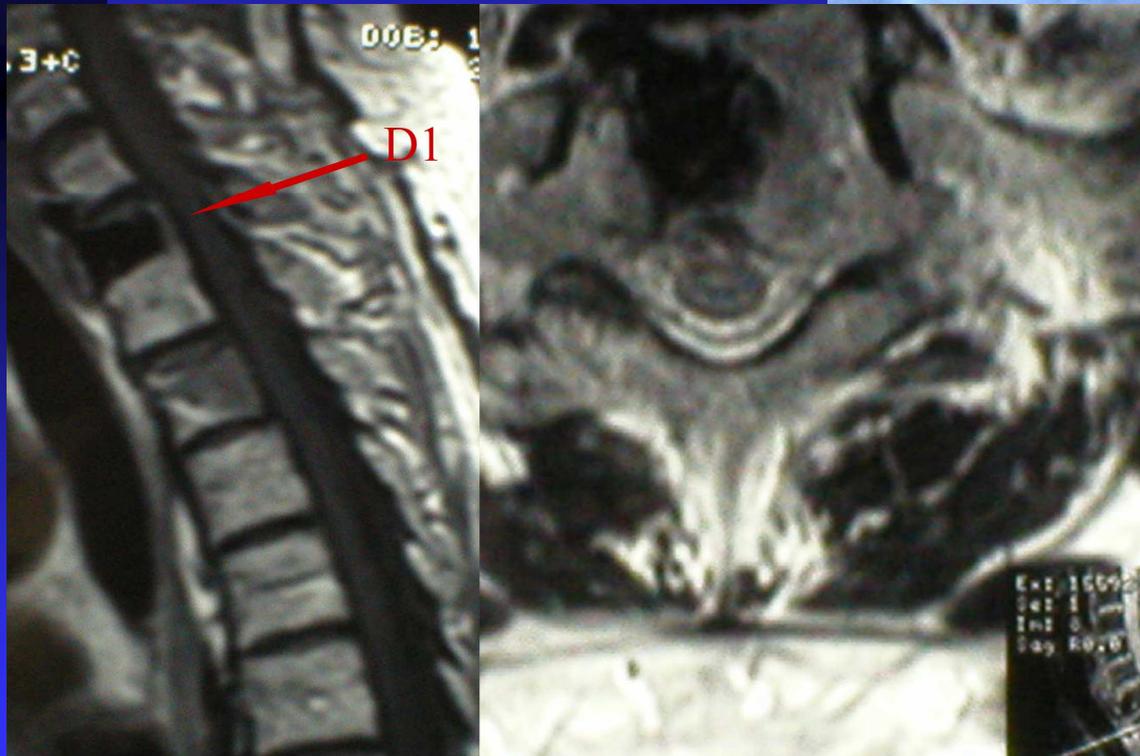
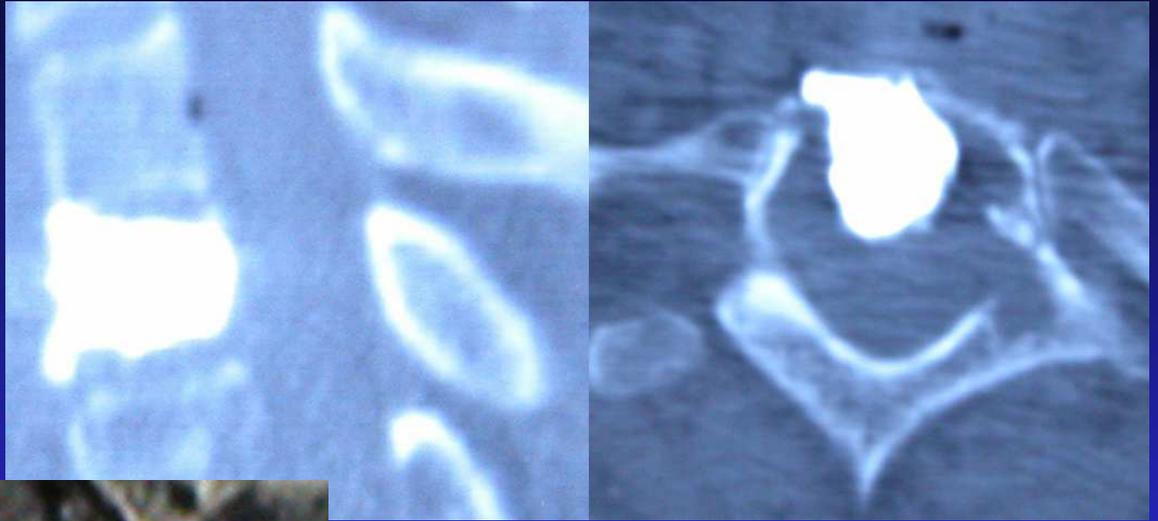
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Uomo 54 aa. Mieloma D1. Intensa dorsalgia.



RMN pre-op

Somatectomia e cifoplastica per via anteriore.



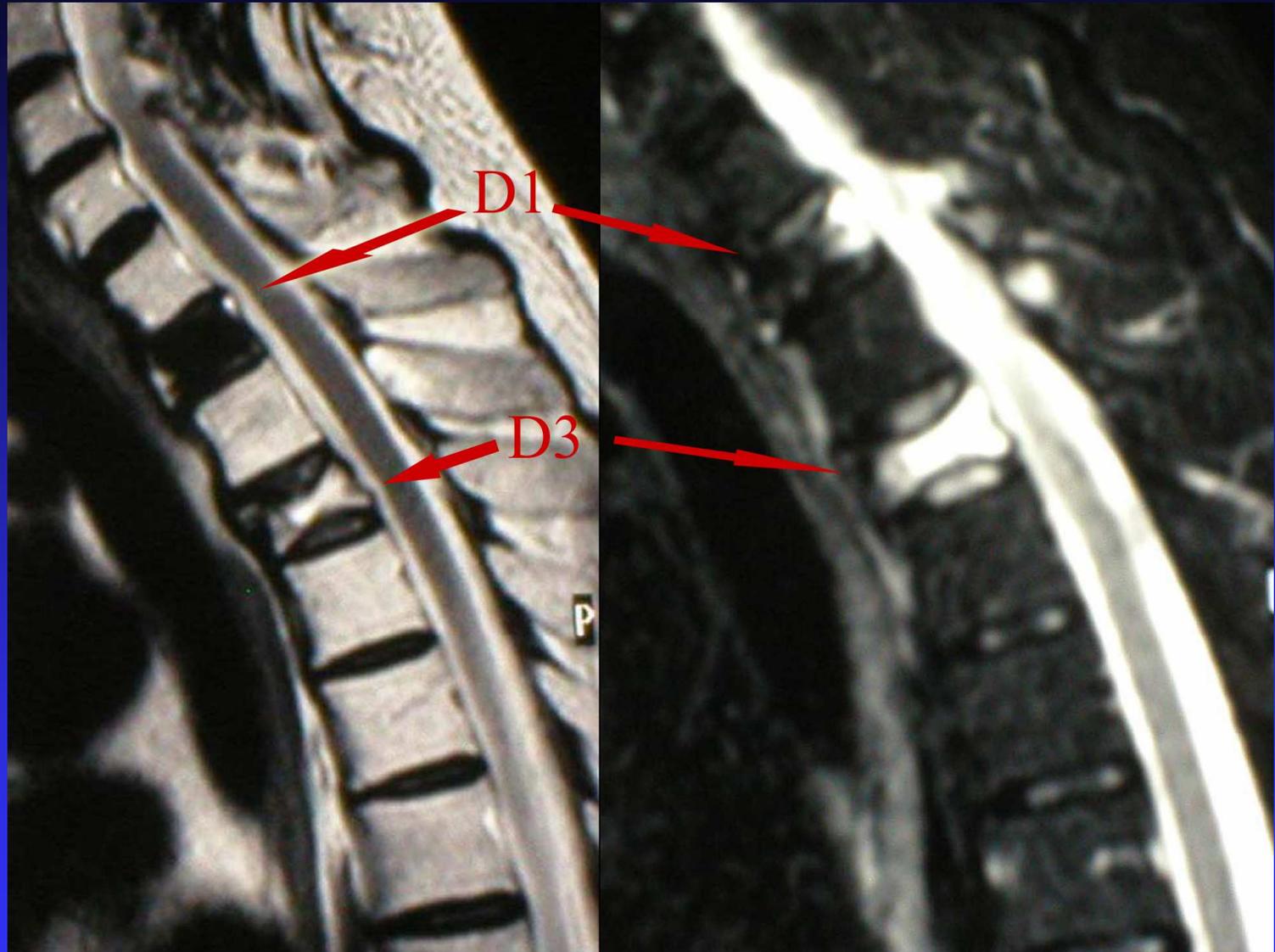
Tac post-op

RMN post-op



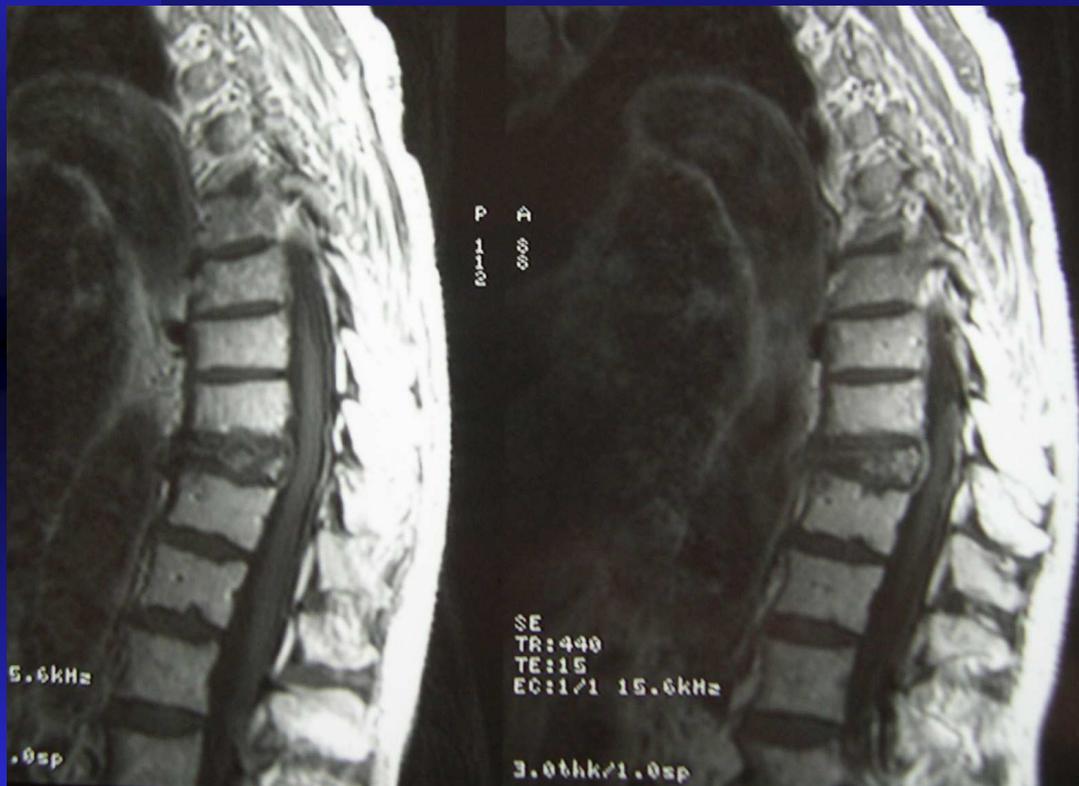
Approccio chirurgico

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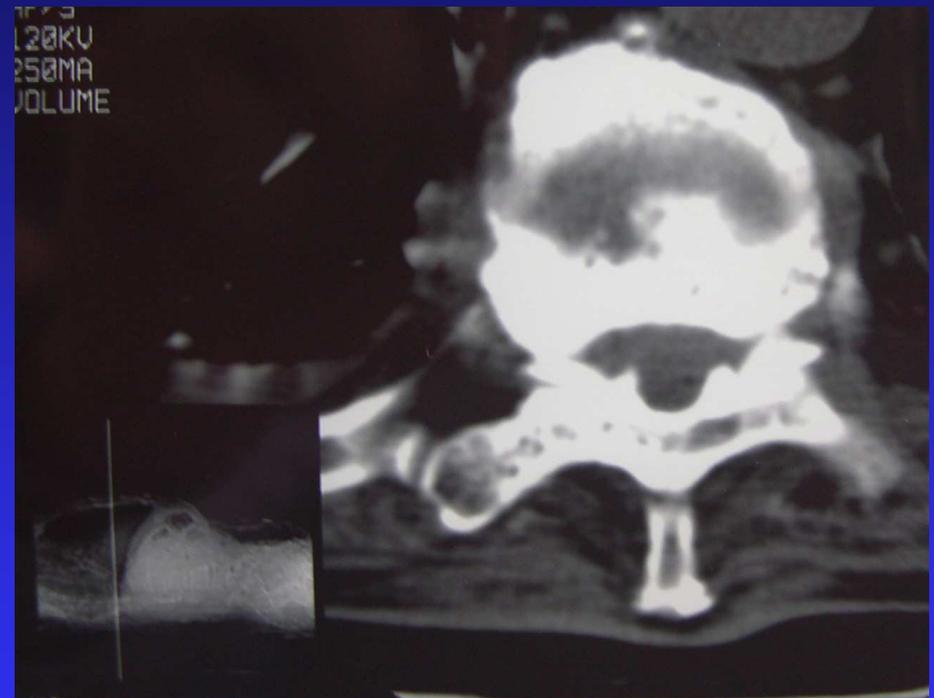


RMN a 1 anno

Uomo 81 aa. Metastasi D10 da carcinoma vescicale. Paraplegia.

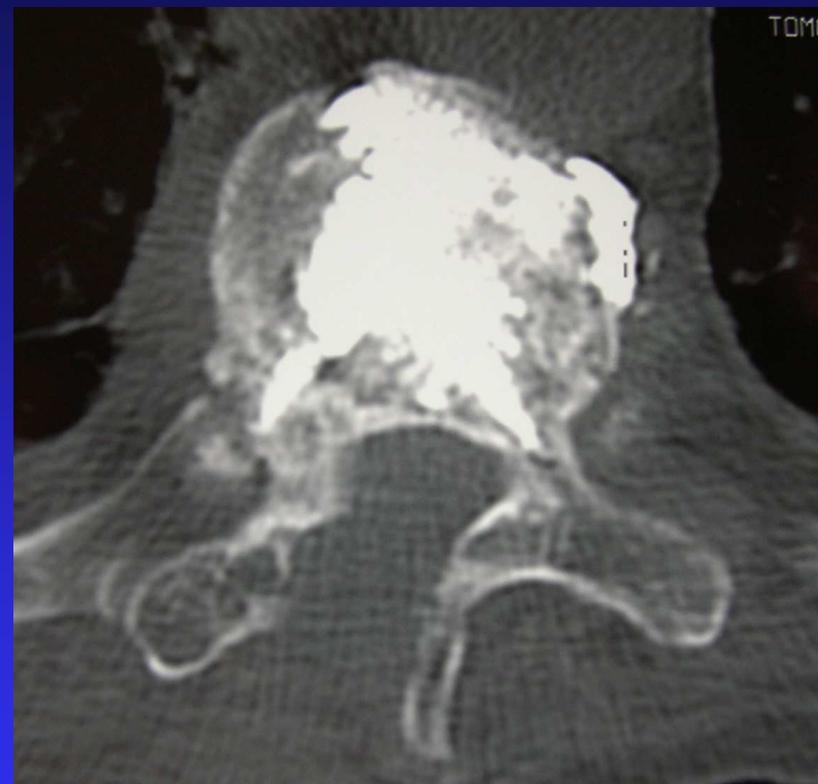
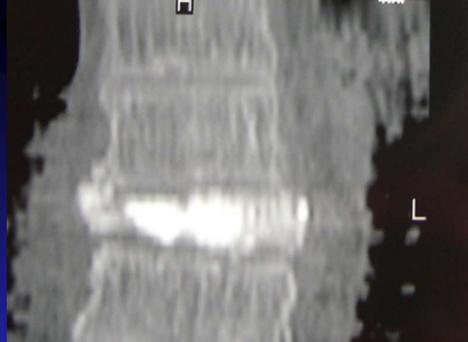


RMN pre-op



TAC pre-op

Laminectomia monolaterale + cifoplastica



TAC post-op

M 74 aa. Metastasi D5,D6,D7 da carcinoma polmonare. Dorsalgia trattata con morfina.



Rx post-op

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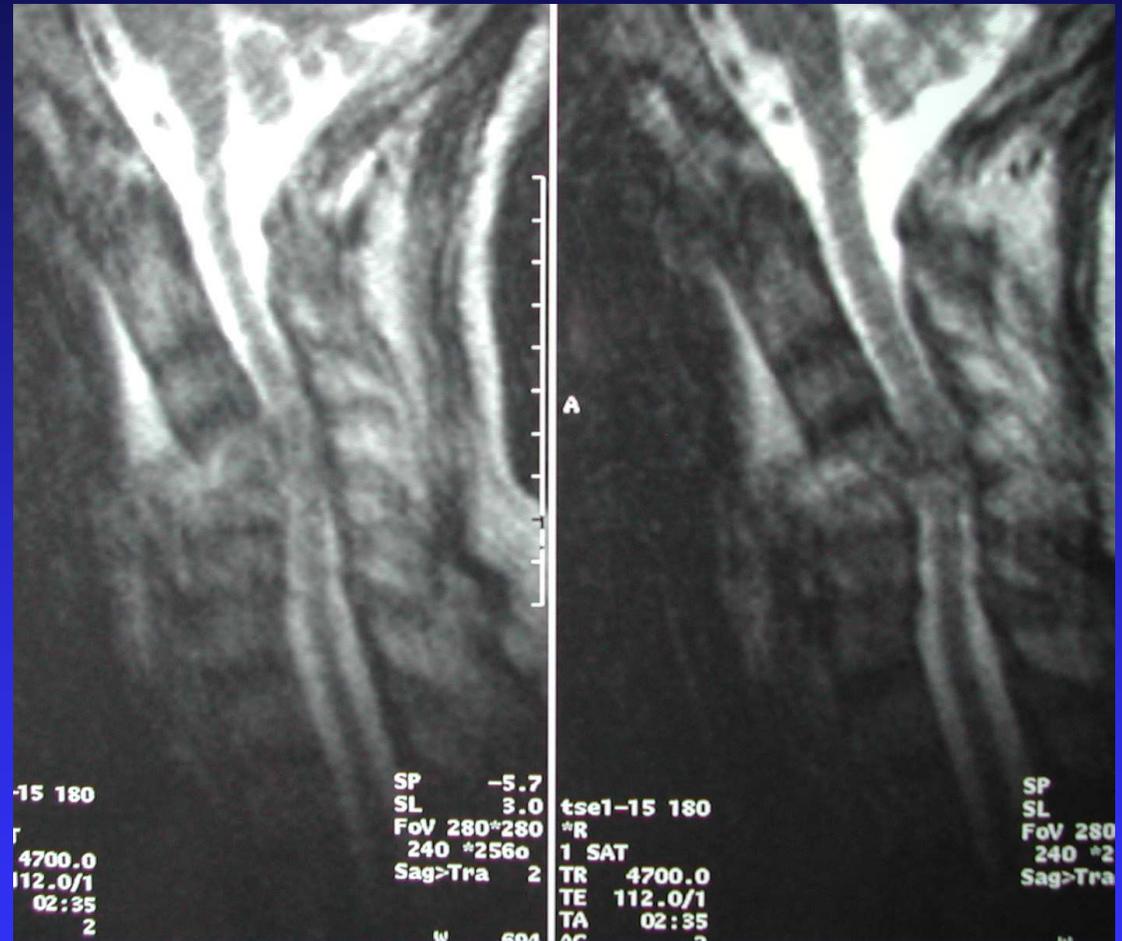
Follow-up a 30 gg

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Uomo 71 aa. Mieloma C4-C5. Grave Monoparesi.

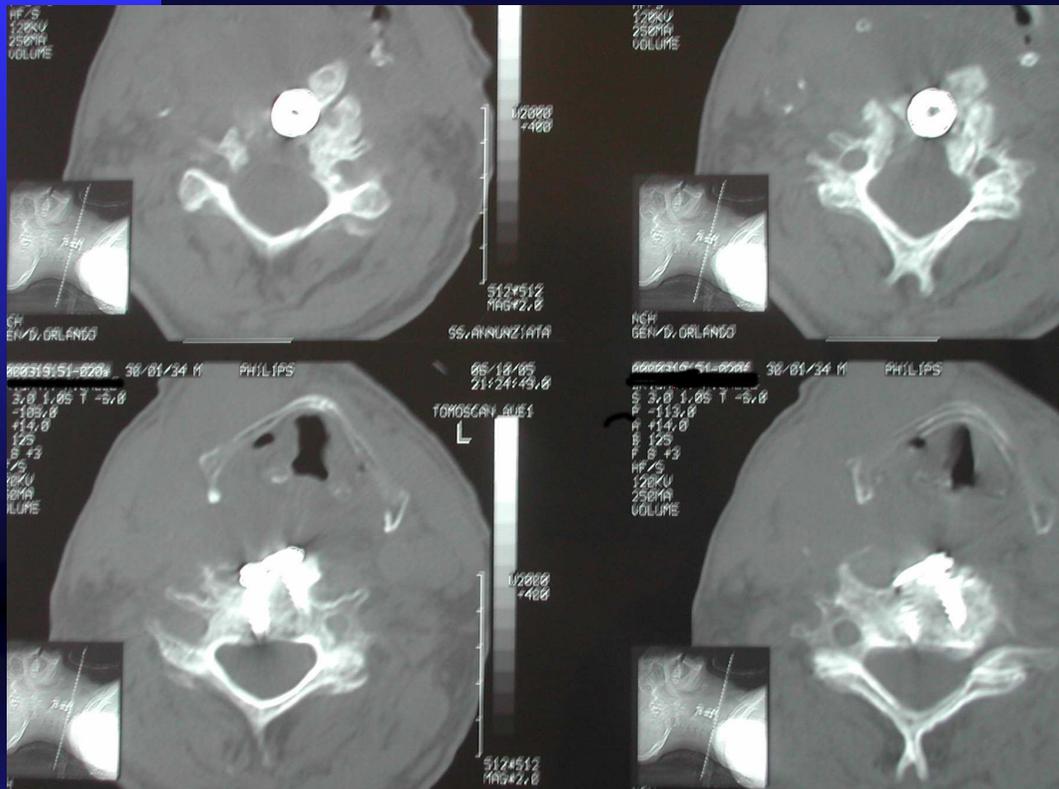


Rx cervicale

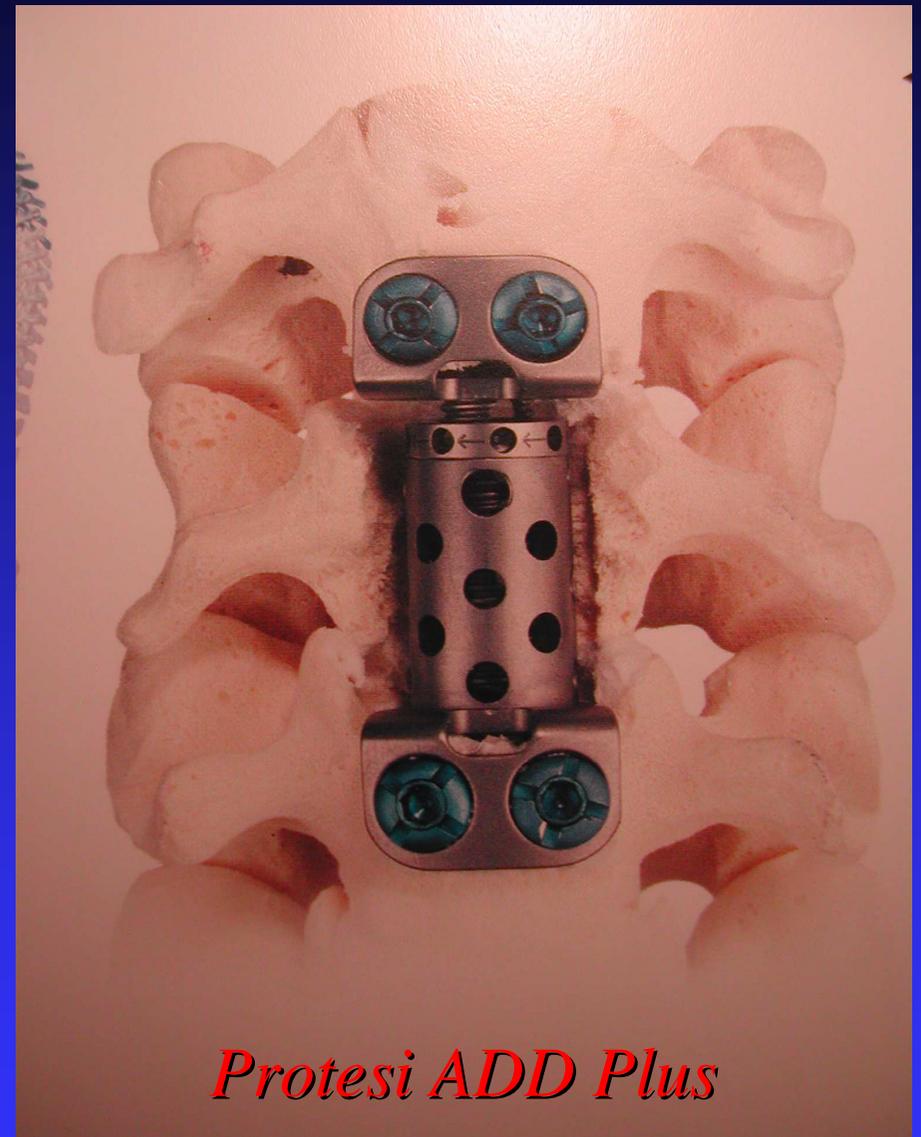
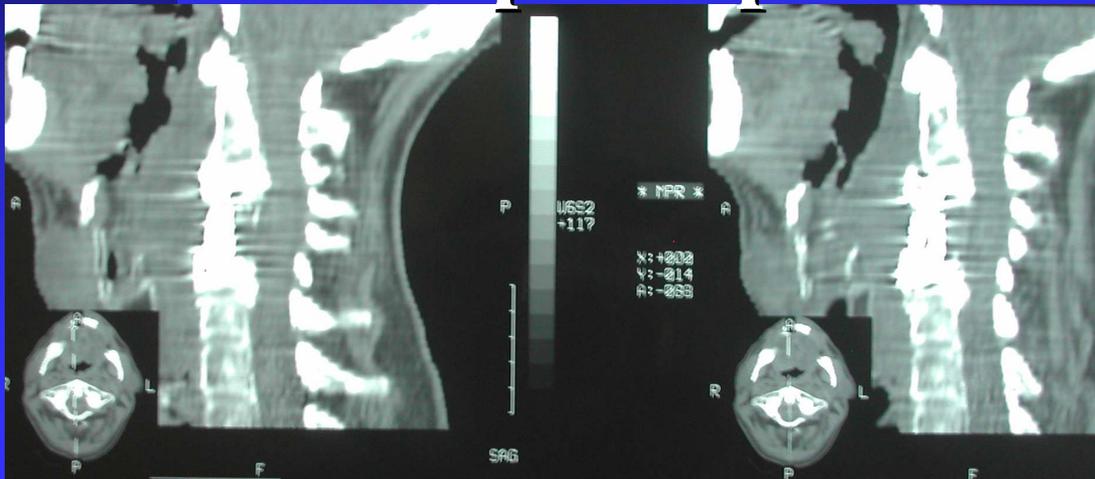


RMN pre-op

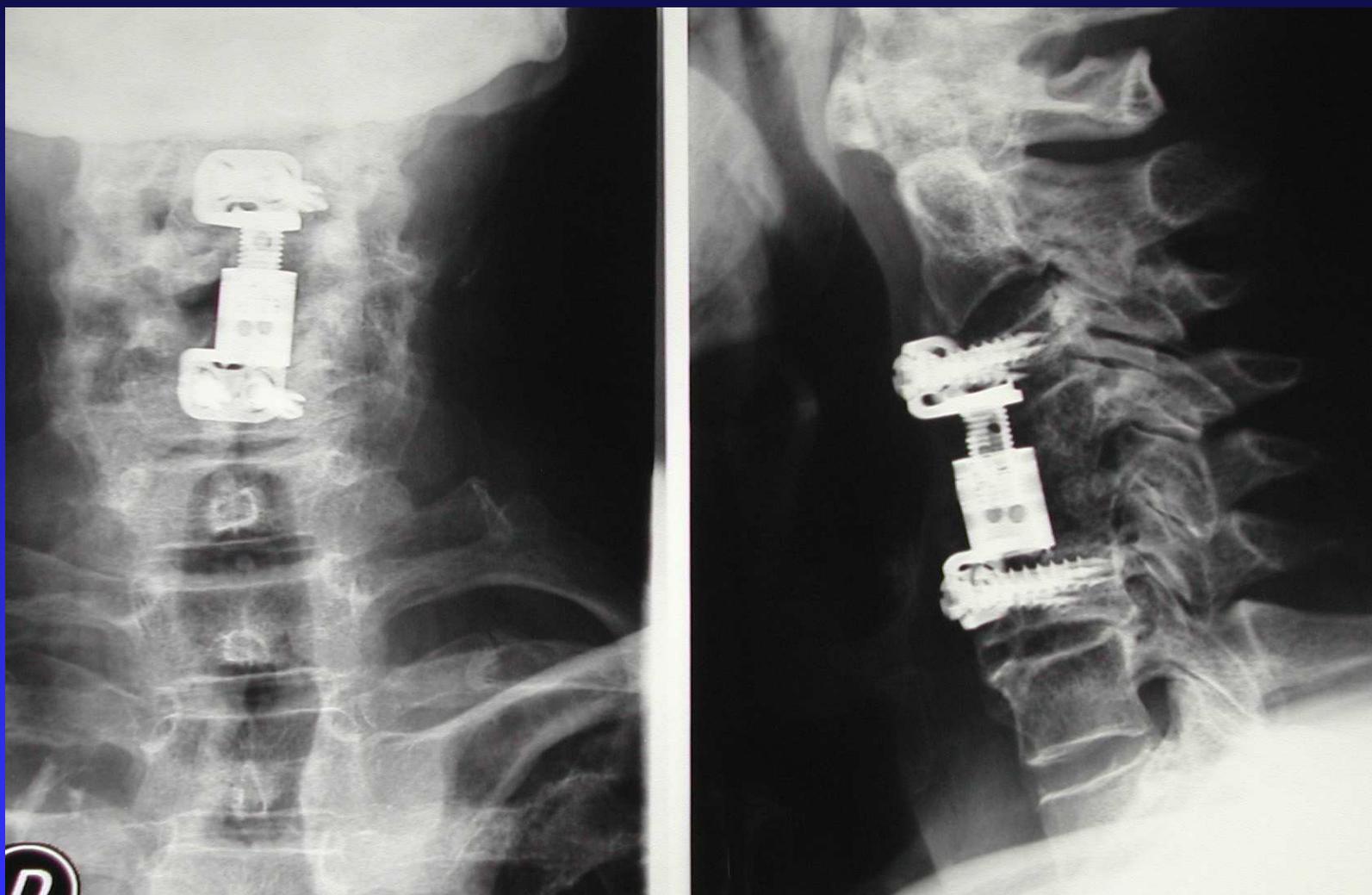
Somatectomia C4-C5 ed impianto protesi ADD Plus



TAC post-op

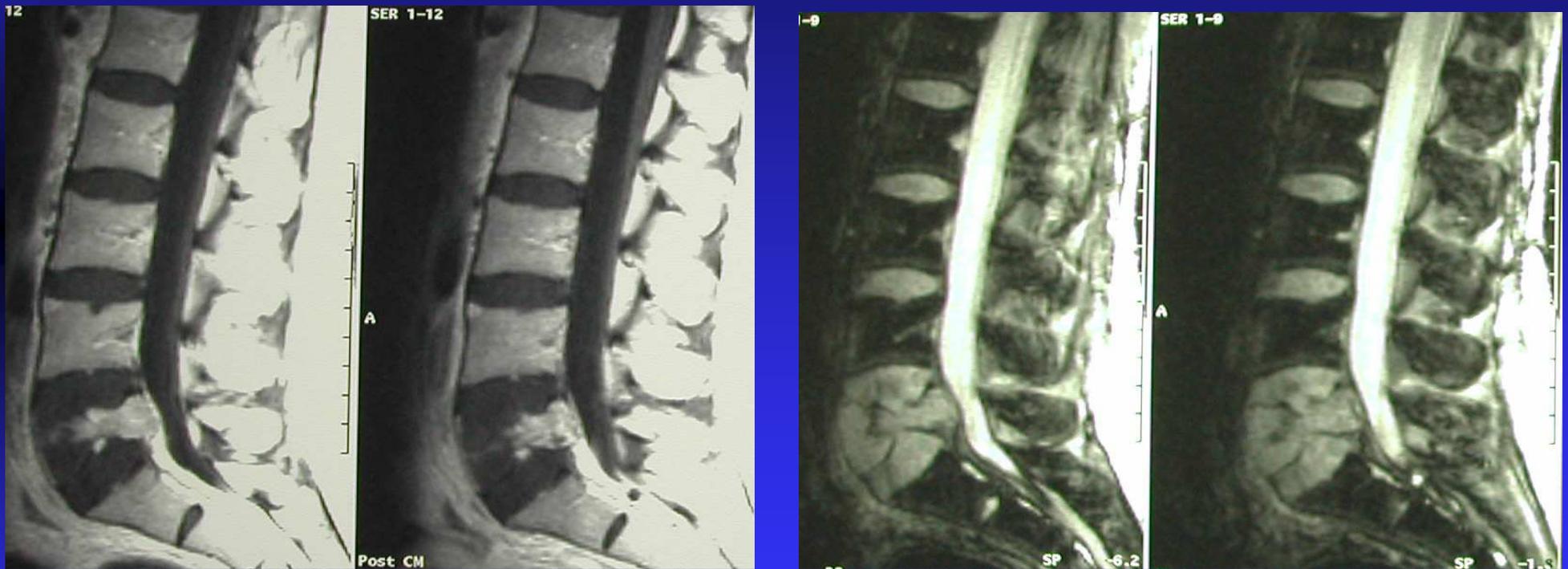


Protesi ADD Plus

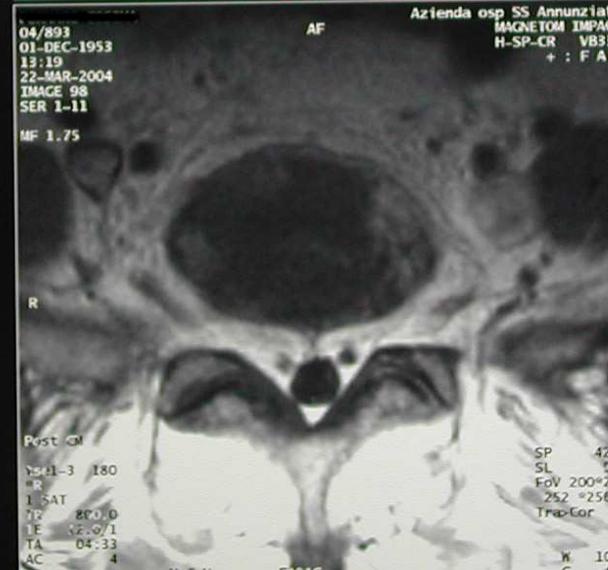
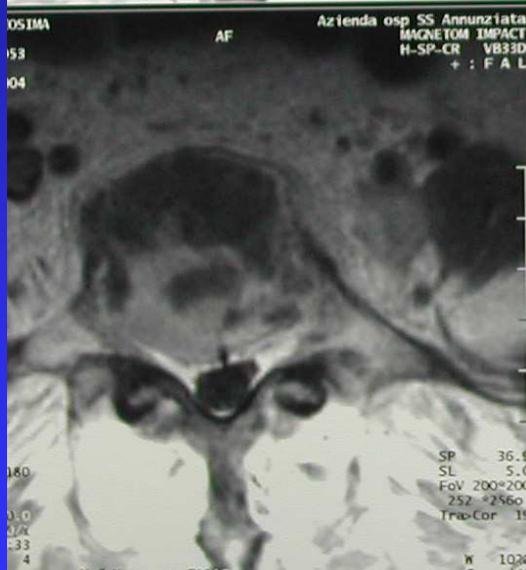


Rx a 18 mesi

Donna 50 aa. Metastasi L5 da carcinoma della mammella. Lombalgia.

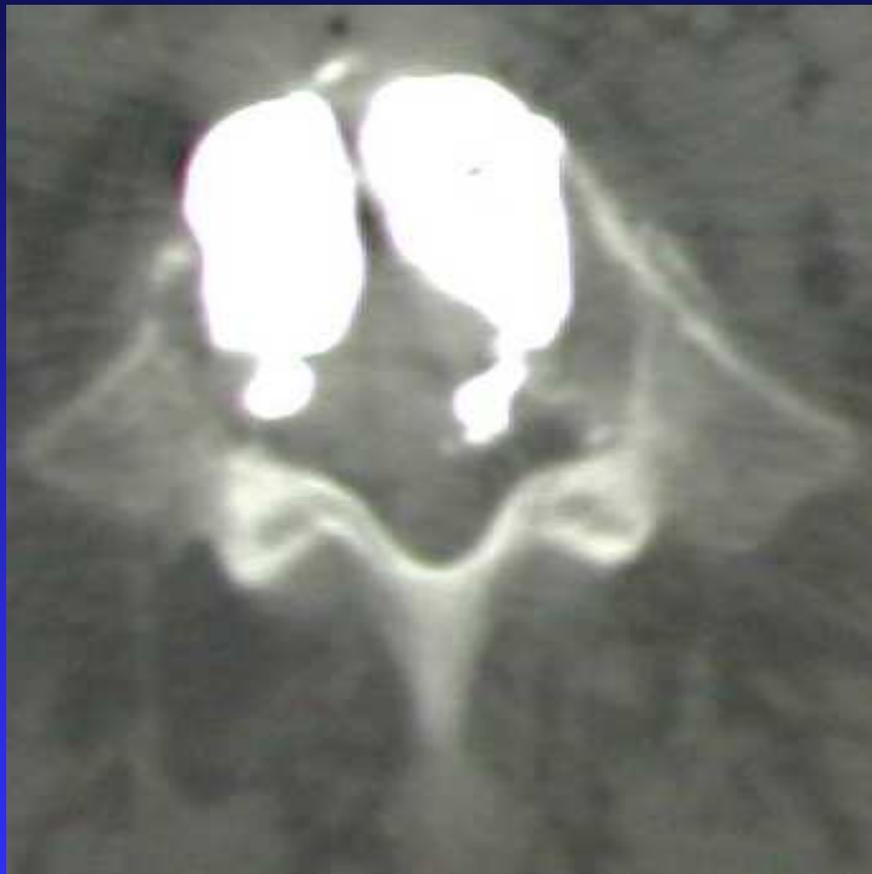


RMN pre-op



RMN pre-op

Cifoplastica di L5 con PMMA



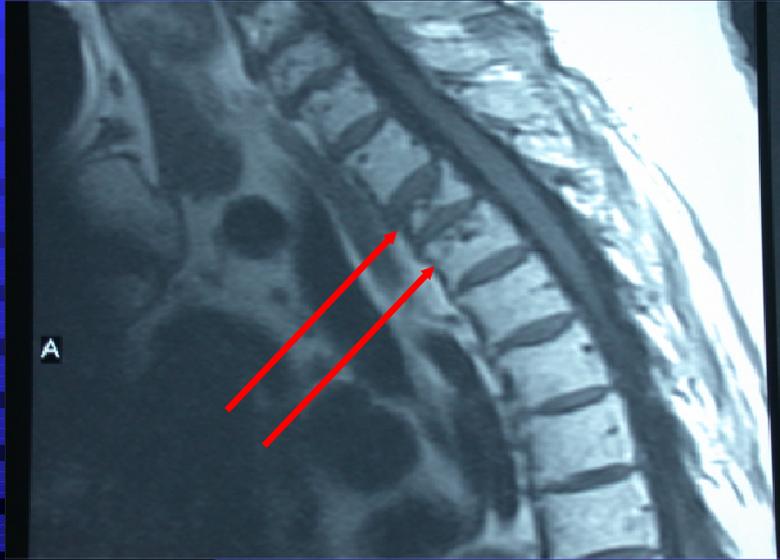
TAC post-op



Follow-up a 6 mesi

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Donna 81 aa. Crollo D10,D11,L3,L4 da mieloma multiplo in osteporotica.



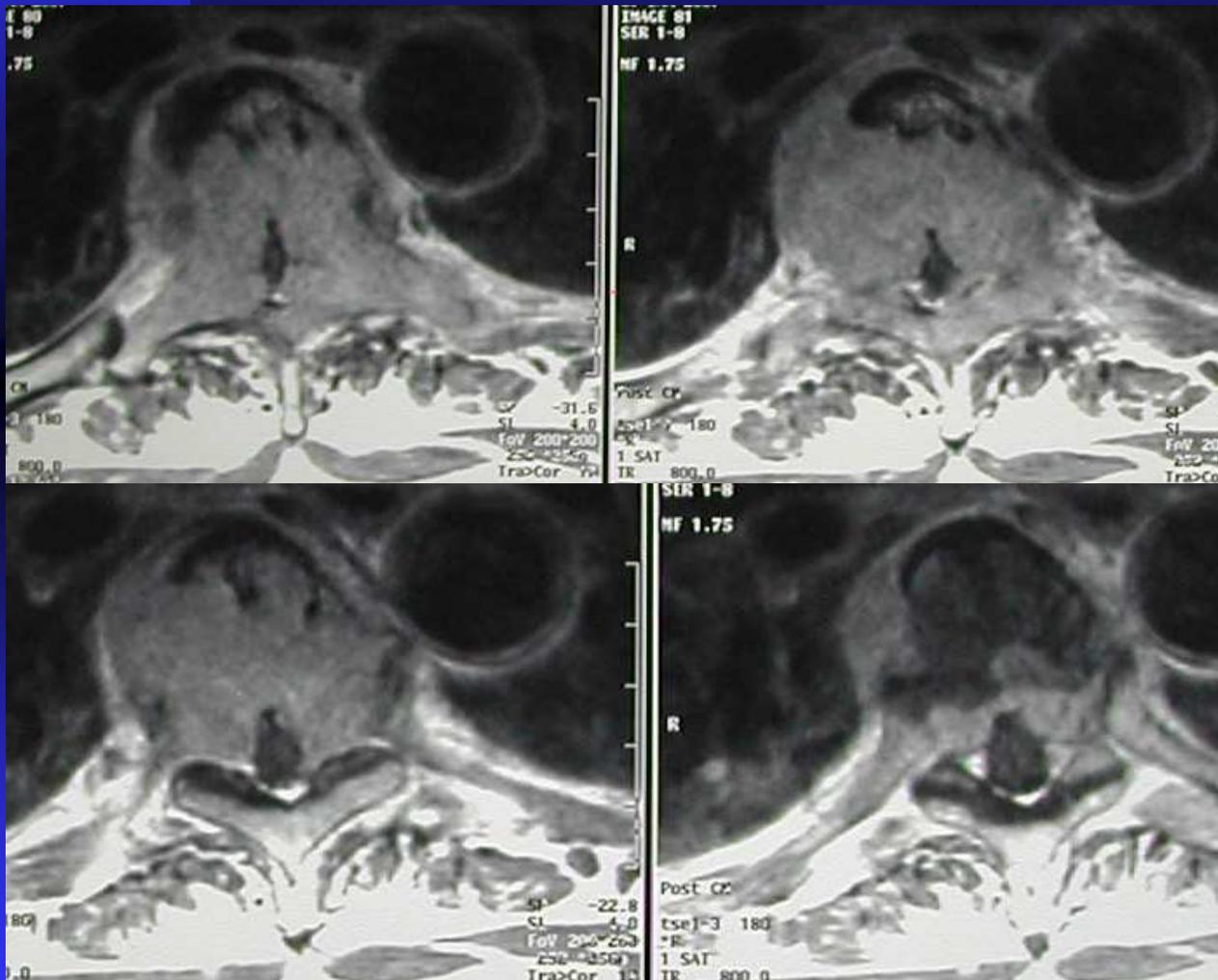
**RMN
pre-op.**



**Rx
post-op.**



Uomo 77 aa. Mieloma D5. Dorsalgia e paraparesi.



RMN pre-op

Laminectomia monolaterale D4-D5 e Cifoplastica D5

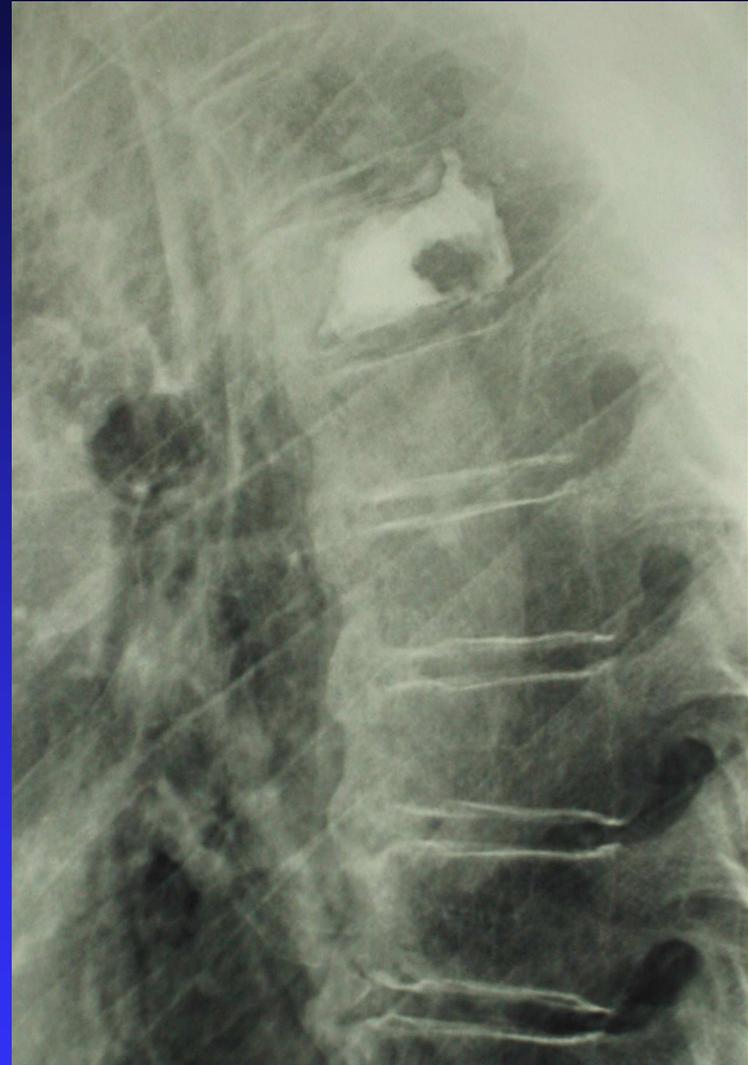
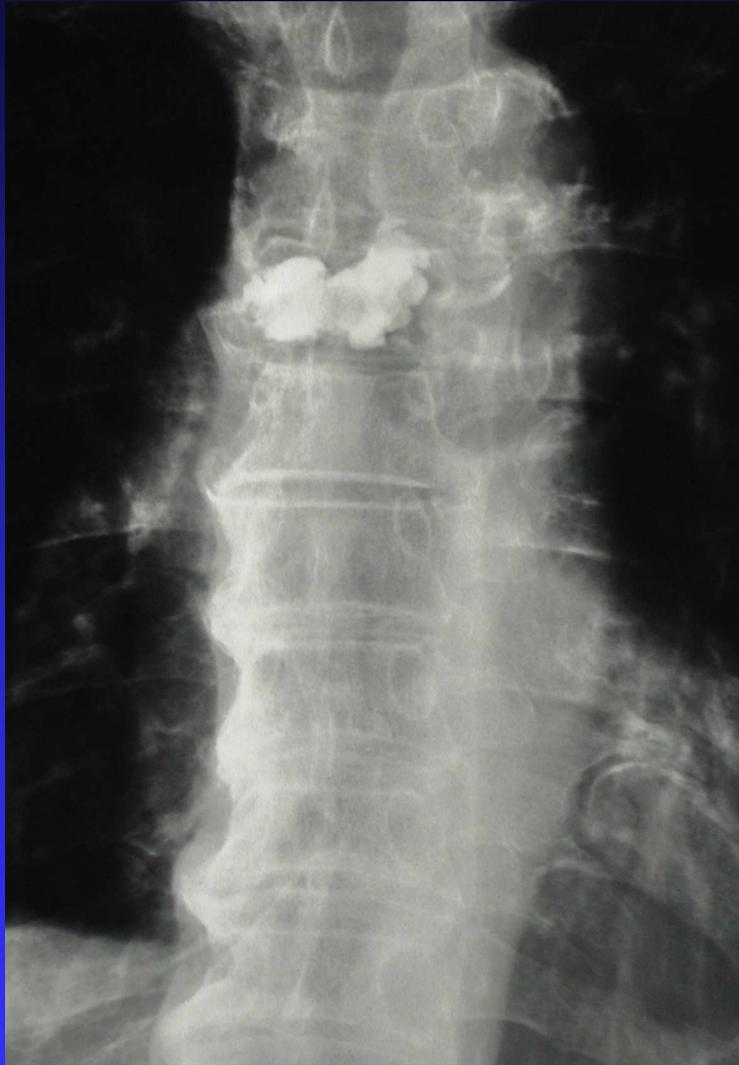
D4



D5



Tac post-op



Rx post-op

D6



TAC a 30 gg



Follow-up a 30 gg

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CONCLUSIONI

Laddove le condizioni cliniche e radiologiche del paziente lo consentono, il trattamento chirurgico deve essere sempre e precocemente proposto per cercare di migliorarne la qualità di vita.

A tal fine il trattamento multimodale rappresenta il percorso terapeutico più completo nel management dei pazienti con metastasi vertebrali.

GRAZIE