SURGICAL TREATMENT OF EARLY ONSET SCOLIOSIS WITH HYPERKYPHOSIS WITH GROWING SPINAL IMPLANTS

Visto a 7 aa
Cifoscoliosi toracolombare emispondilo T12 trattamento con MW poi
Lionese
Andatura barillante (anserina)
Pronazione del piede sn
Peggioramento della marcia anserina nell'ultimo anno

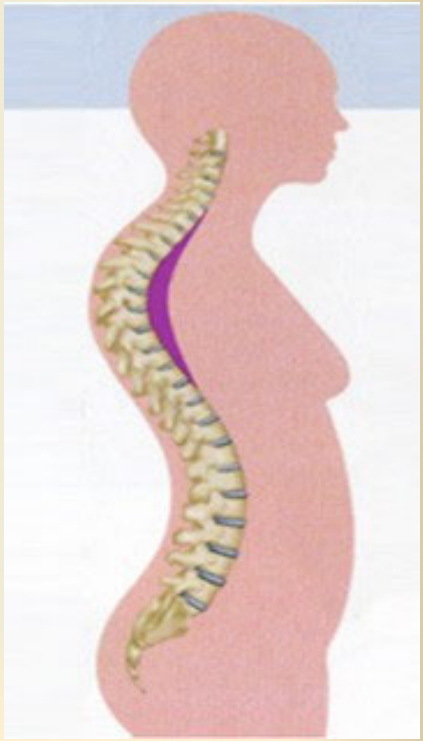
Tiziana Greggi
Francesco Lolli, Elena Maredi, Konstantinos Martikos, Francesco Vommaro, Mario Di Silvestre, Andrea Baioni.

Spinal Deformity Surgery Department, Rizzoli Orthopaedic Institute

Distraction based sytems.....then the hyperkyphosis is not considered as a correct indication.

Aim of our study

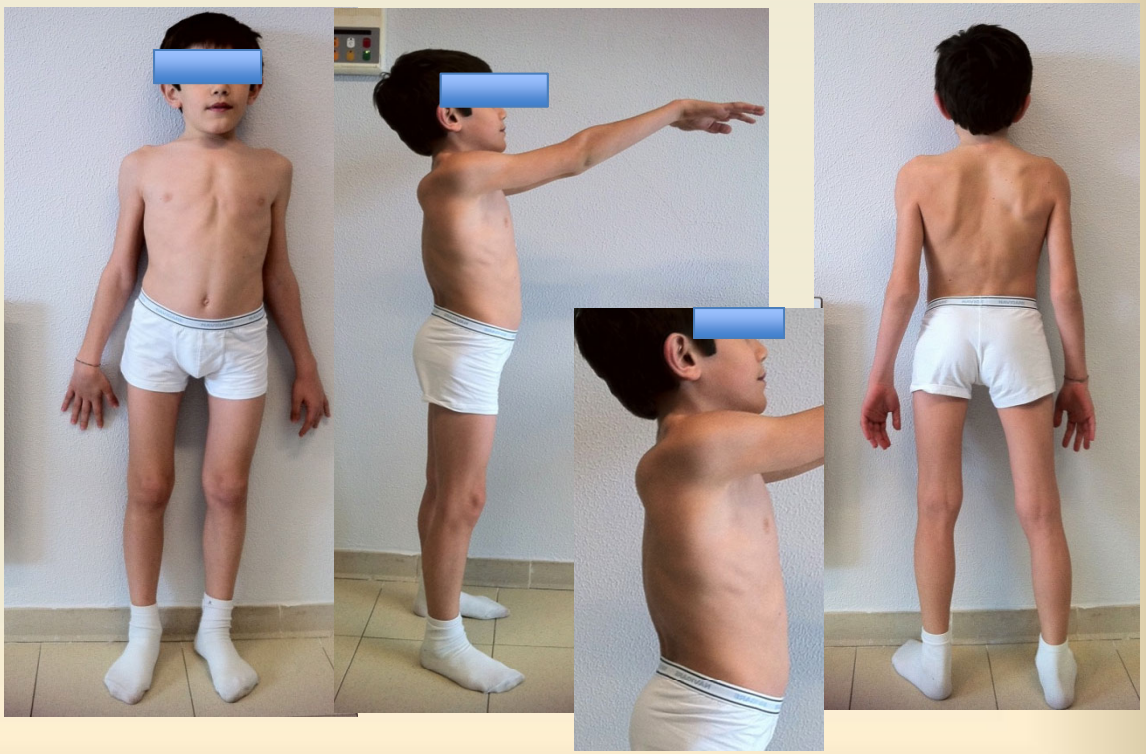
Is to show how growing rod can be used safely ad effectively in the treatment of hyperkyphosis.



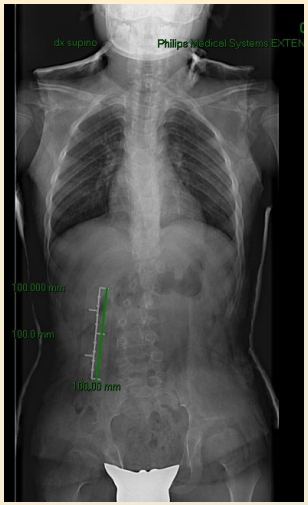
CASE 1

M 10 years old affected by Morquio syndrome (hemivertebra in T12)

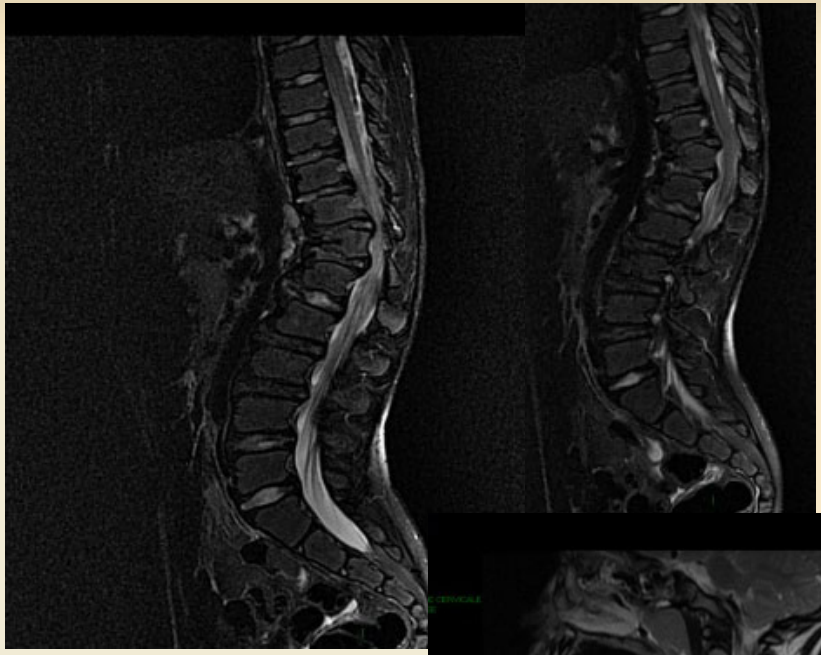
T10-L2 kyphosis was 60°.

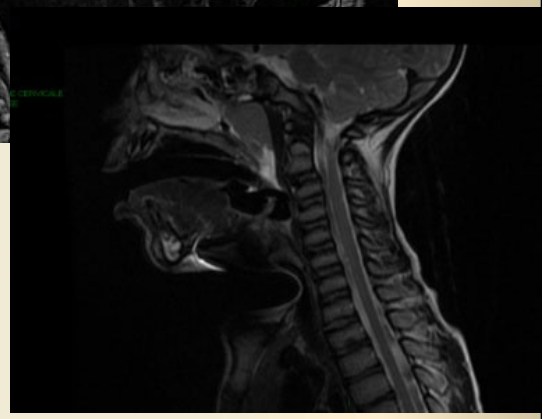


CASE 1



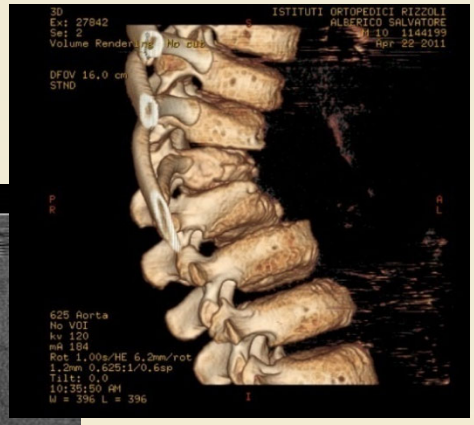
Risser Cast Test: flexibility

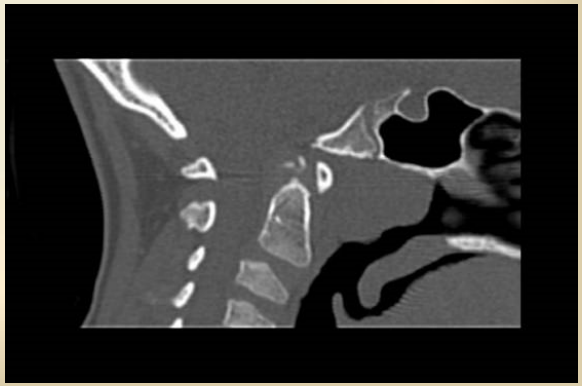




MRI:
No malformation

hemivertebra
in T12

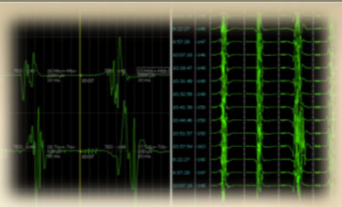




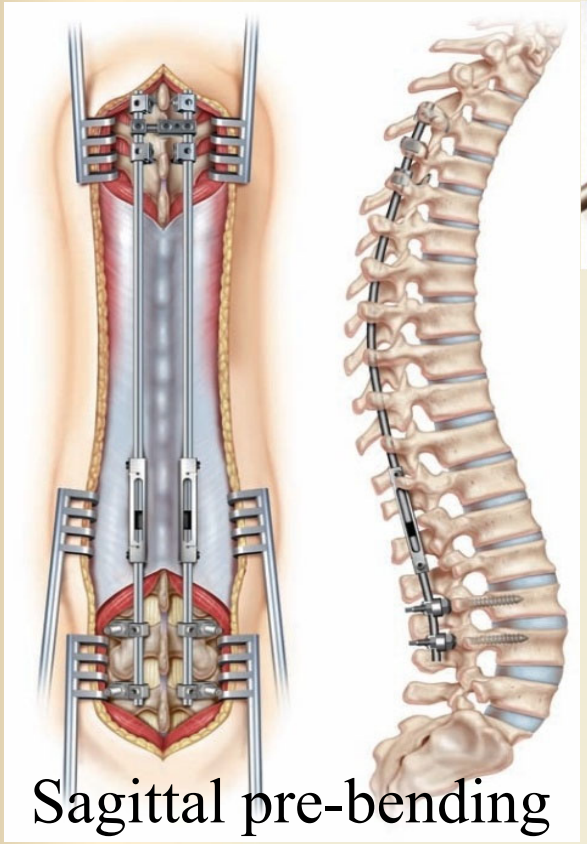
Dens
hypoplasia
without
instability

CASE 1

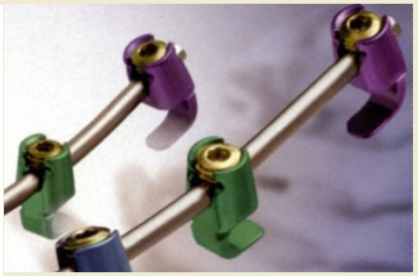
Dual Growing Rod



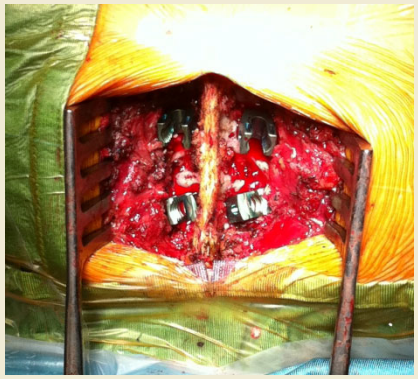
minivasive



Sagittal pre-bending



Proximal claw

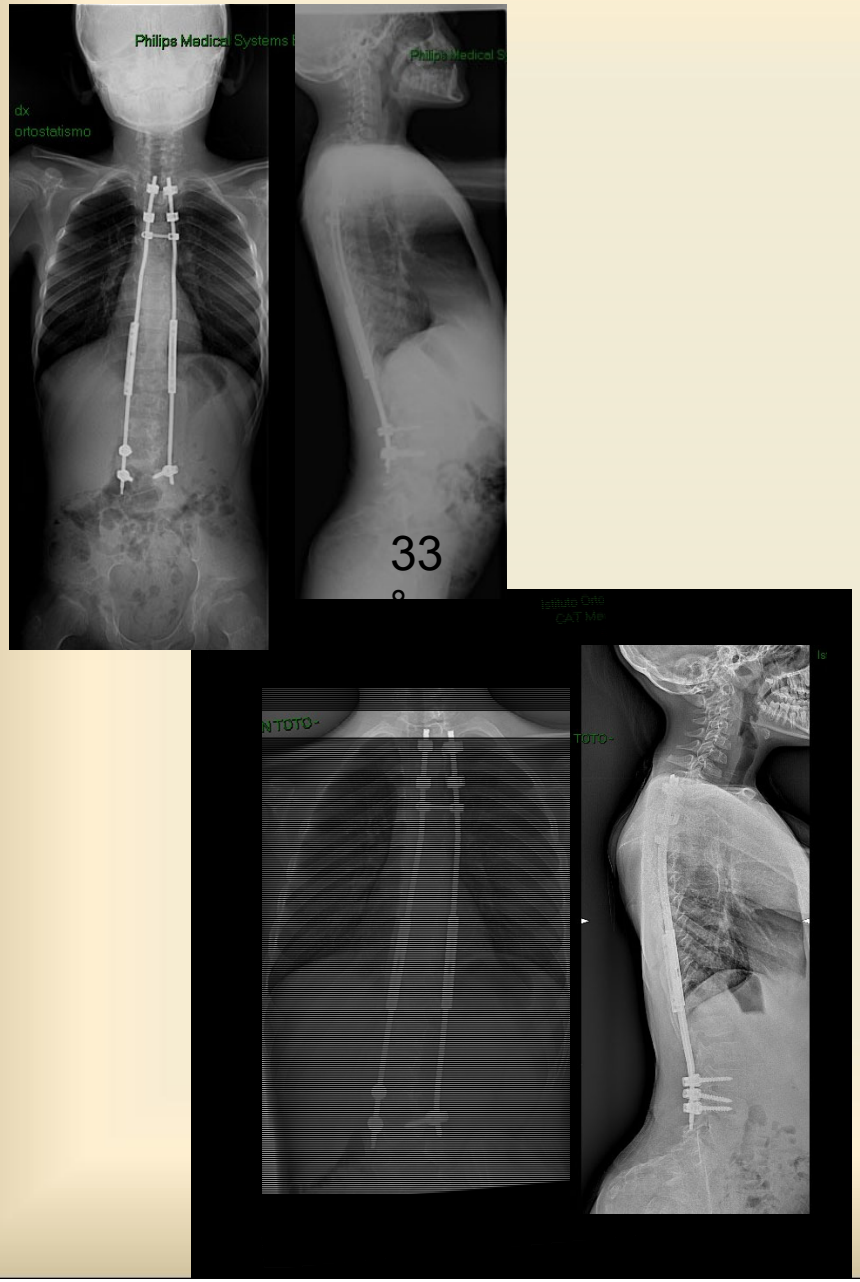


Distal pedicle screws

“cantilever” technique

Two lengthening procedures were performed

CASE 1 Dual Growing Rod T3T4 - L3 L4

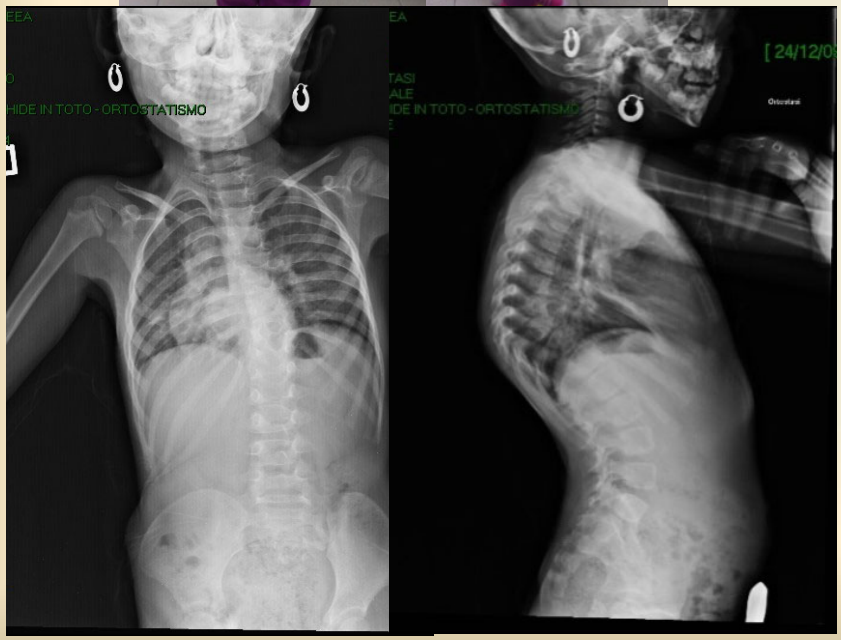


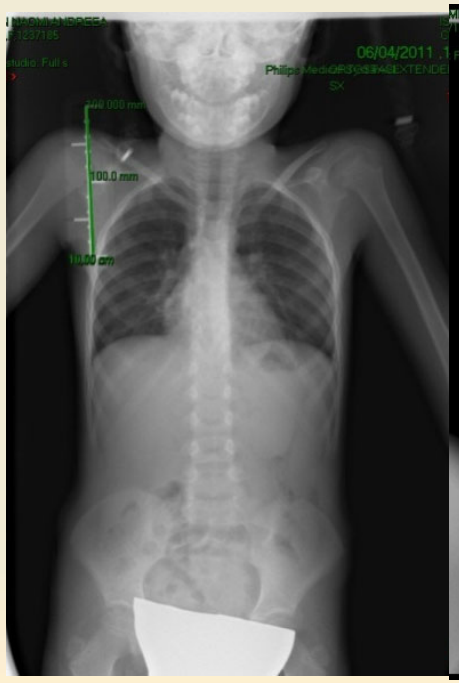
After 2nd lengthening

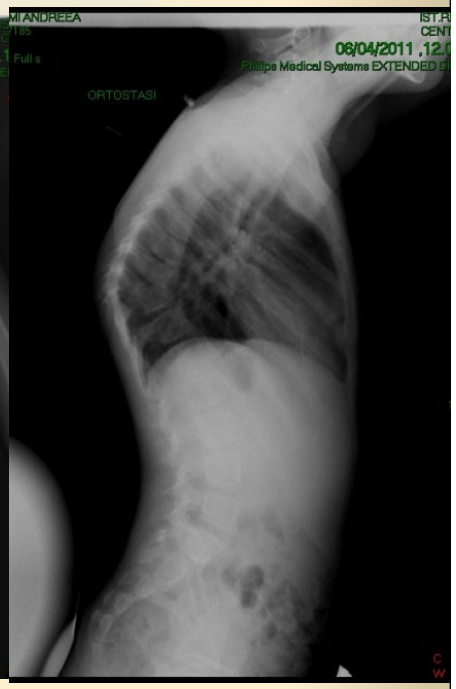
CASE 2

F 7 years old affected by Pott disease ("vertebra plana" in T11)

T10-L2 kyphosis was 70°



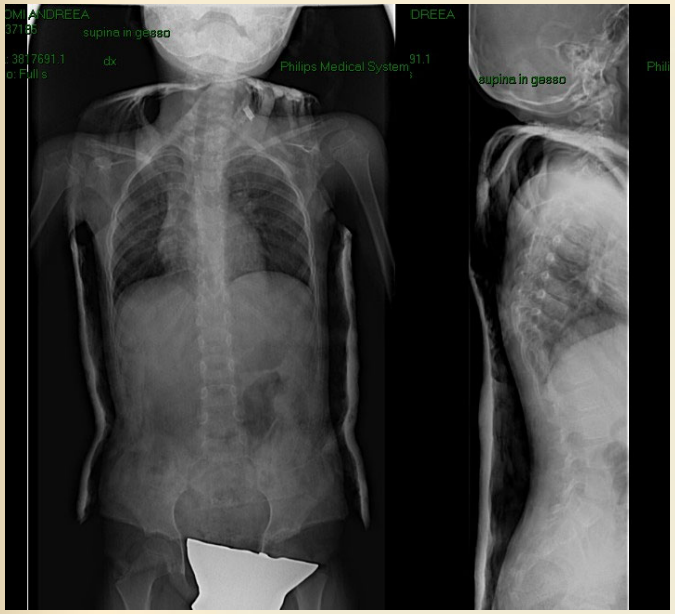




2009

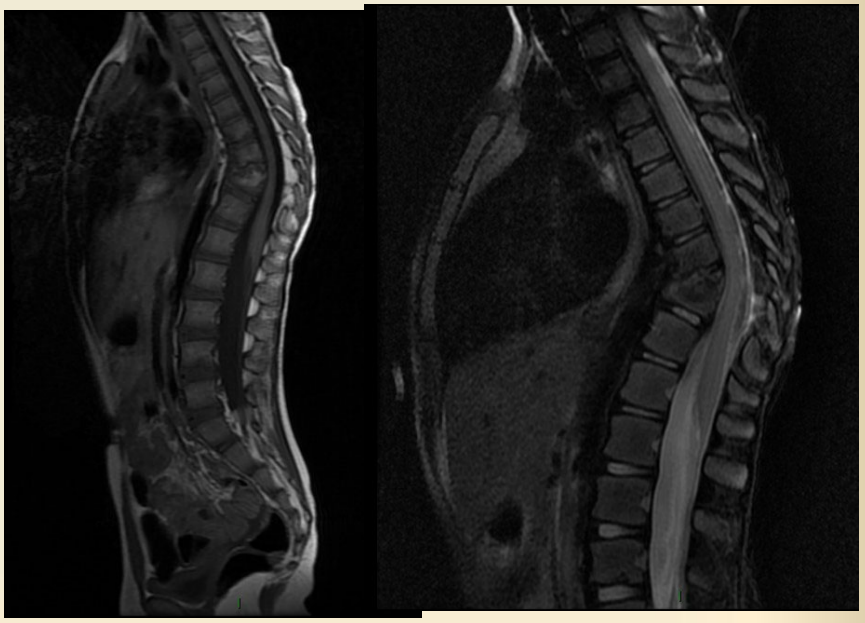
2011

CASE 2

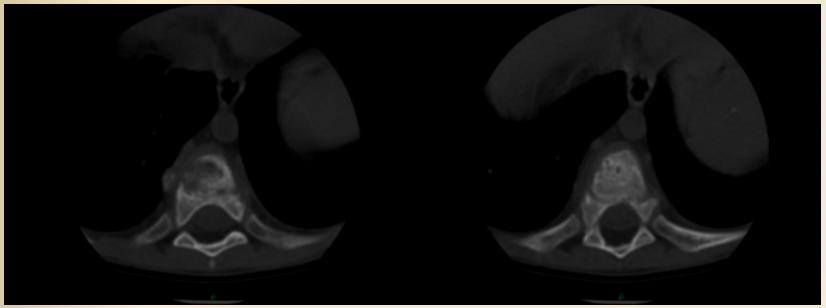


Risser Cast Test: flexibility

MRI:
No malformation
No activity of Pott desease



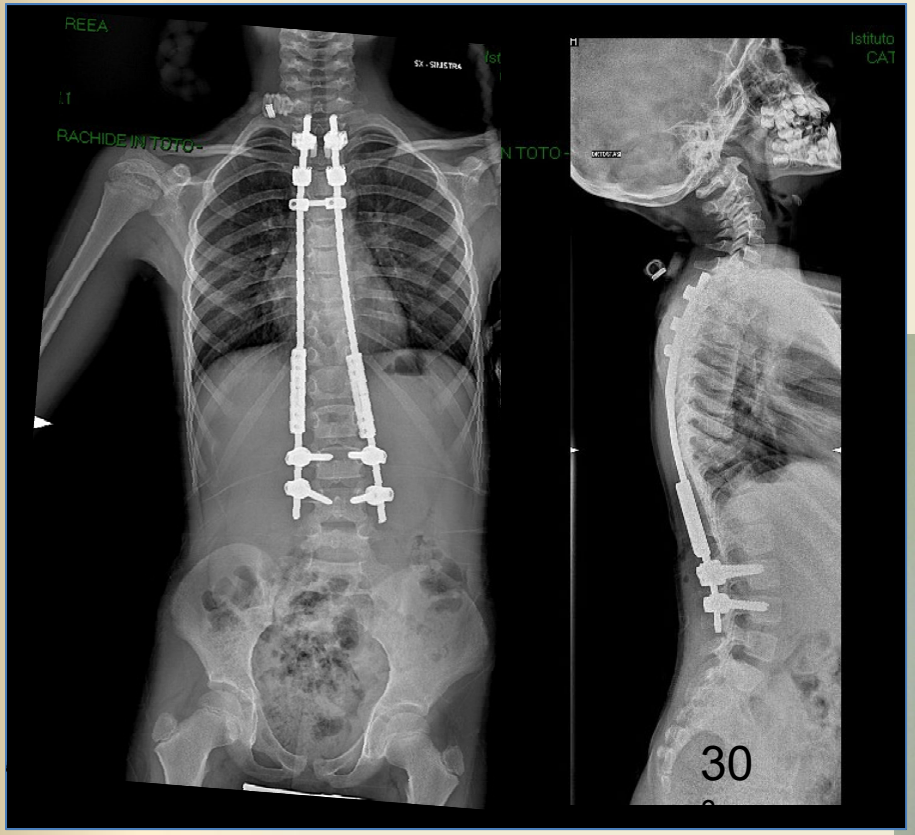
Vertebra plana in T11



Preoperatve profilaxis with Isonazide

CASE 2

Growing rod was implanted (proximally hooks and distally screws).
The correction was achieved through a “cantilever” technique



The correction was maintained.
No complications occurred.

Conclusions

Those preliminary results showed that growing rods can be safely used in the treatment of hyperkyphosis.

Obviously, the number of patients is very little, and we **need a follow up greater** than one year to confirm the efficacy of the treatment and that lenghthening procedures don’t cause loss of correction.