KYPHOPLASTY

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KYPHOPLASTY

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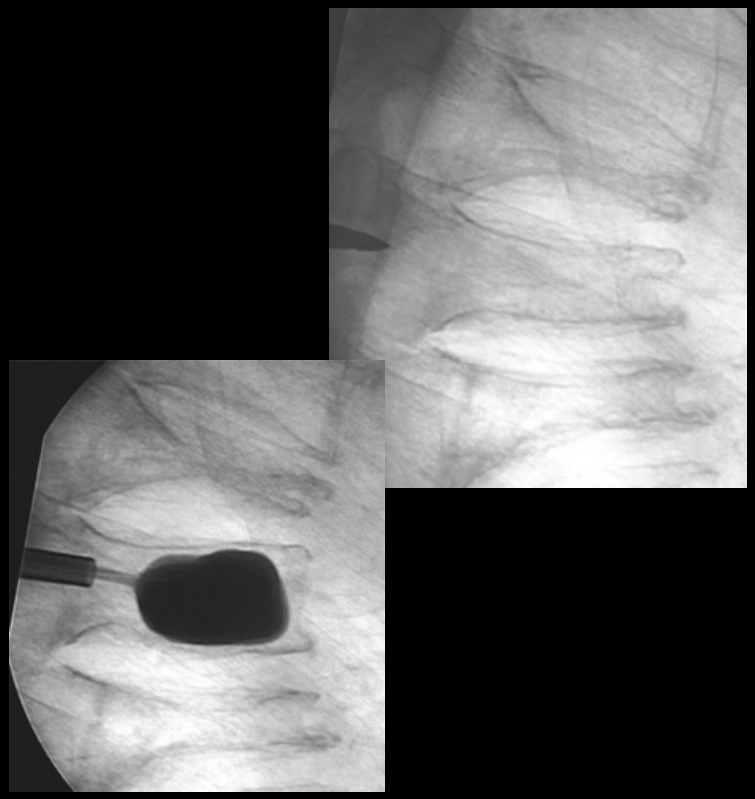
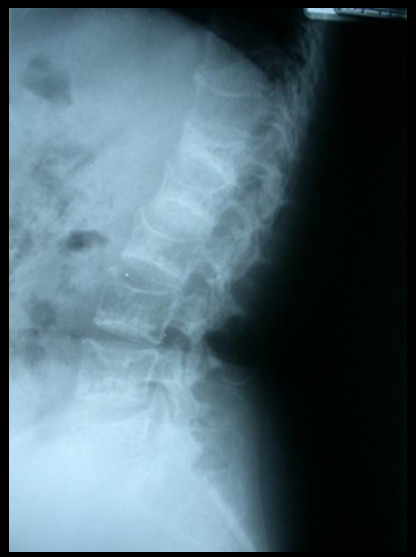
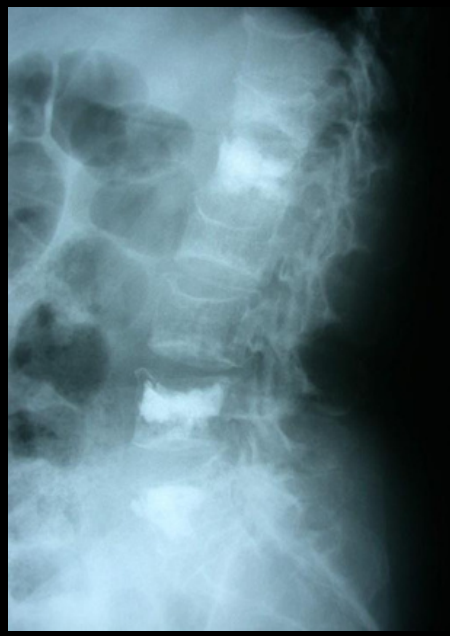
Paris, France

KYPHOPLASTY / VERTEBROPLASTY

- *Objectifs:Vertebroplasty:-Analgisic.*
  -Stabiliser.
  Kyphoplasty: - Correction of vertebral body deformity
  -Prevention of secondry cyphosis

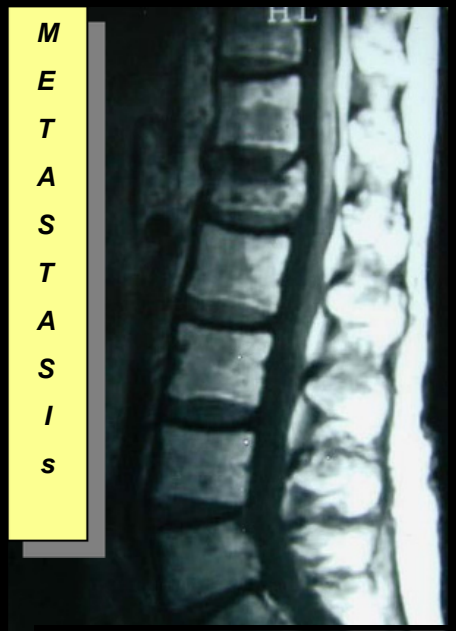






KYPHOPLASTY / VERTEBROPLASTY

METASTASIS



- Indications: Debilitating benign or malignant bone diseases

  -agressive angiomas,

  -bone metastasis ,

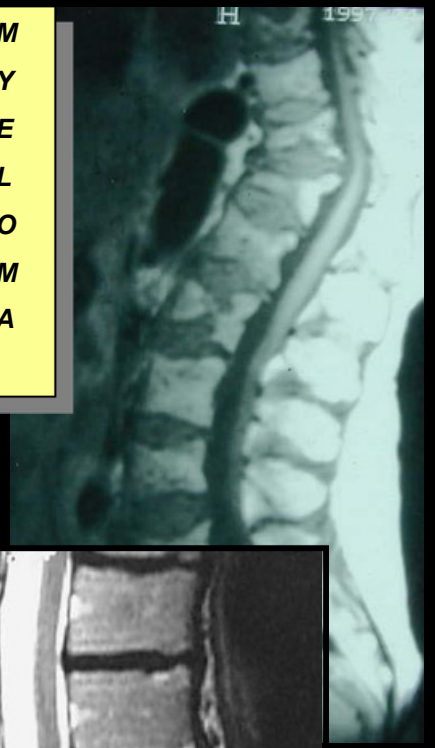
  -myeloma,

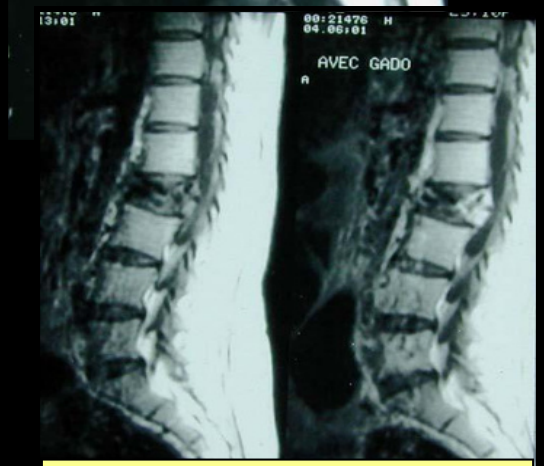
  -Recent osteoporotic fractures,

  symptomatic, refractory to analgesics treatment

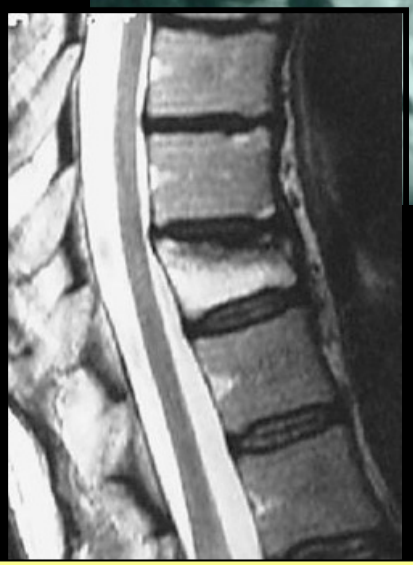
  -

MYELOMA





Agressive Angioma



OSTEOPOROTIC FRACTURES

KYPHOPLASTY / VERTEBROPLASTY

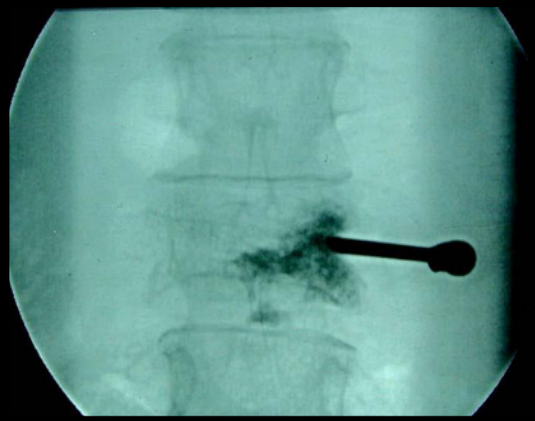
- ***PROCEDURE OF THE VERTEBROPLASTY***

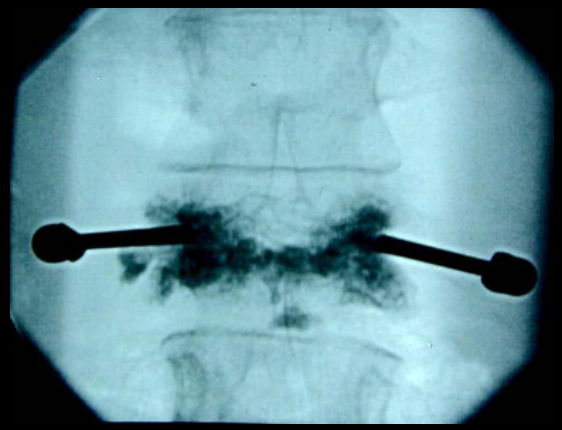
  Widelydescribed inthe litterature

  -General anesthesai.

  -Patient in supine position.

  -uni ou bi-pedicular acces

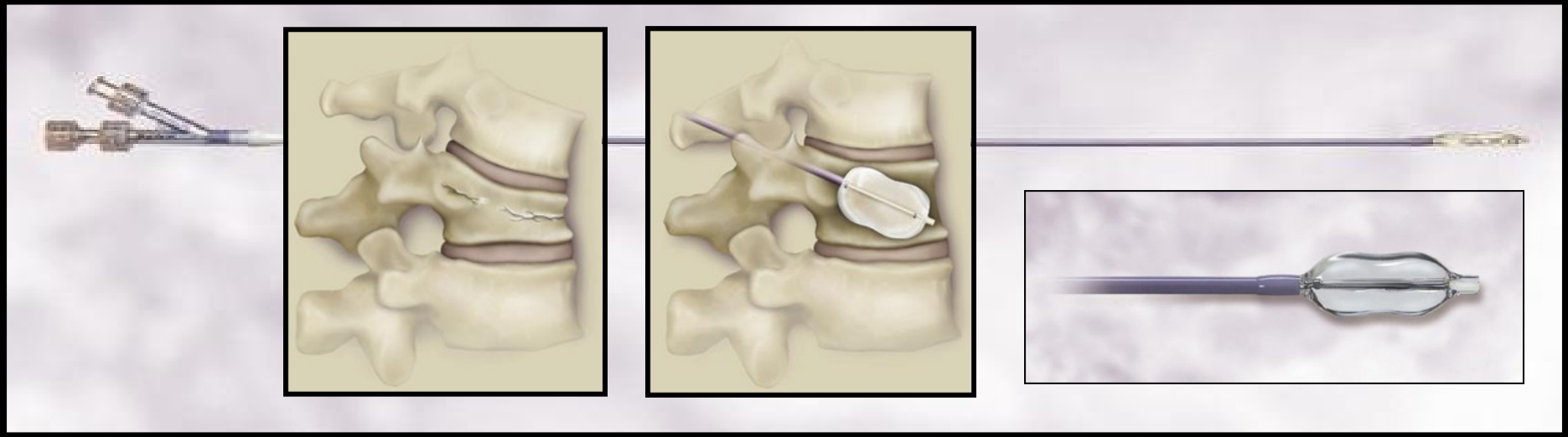




P. Galibert, H. Deramond Neurochirurgie 1987

KYPHOPLASTY

- ***The kyphoplasty** may be considered as a moderne vertebroplasty.*
- *It consists of injection of polymethylmetacrylate intra vertebral under flouroscopy, after ballonn dilatation to get recovary of the vertebral bodyheight .*



KYPHOPLASTY

- ***PROCEDURE OF KYPHOPLASTY:***

- ***Local Anesthesia:***
  - ***-Preferable to the patient***
  - ***-Reduce patient movement***
  - ***-Compromis in case of sever Heart disease***

- ***General Anesthesia:***
  - ***- Preferable Method***
  - ***-More confortable***
  - ***-Strict supine position***

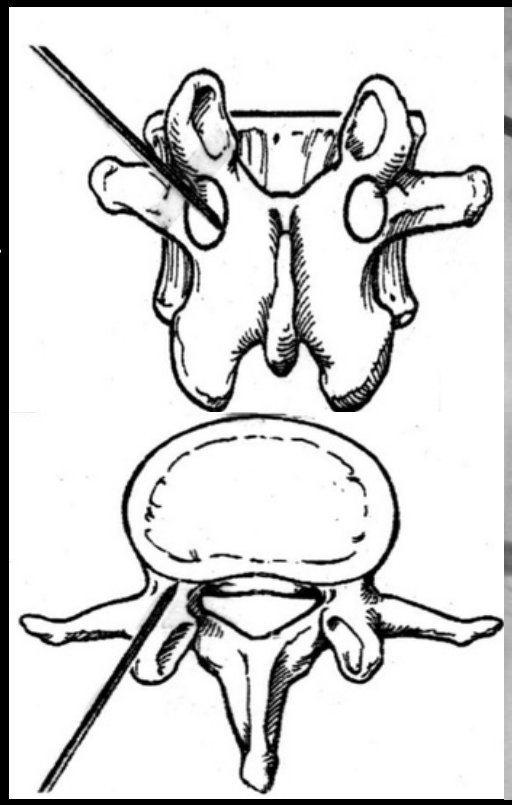
KYPHOPLASTY

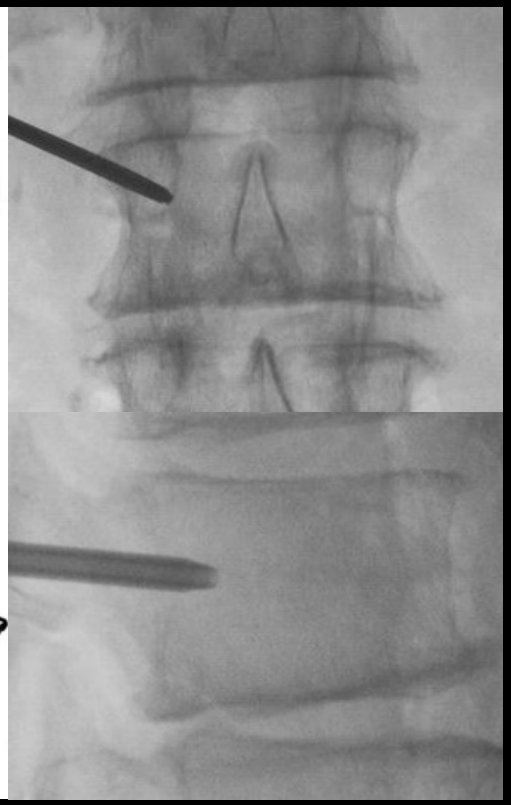
- ***Procedure:***

- bi-pediculaire acces

- a 11 Gauge needle should Be alwaysinside thepedicular eye

- according to an oblique course of the anteromedial and top to bottom

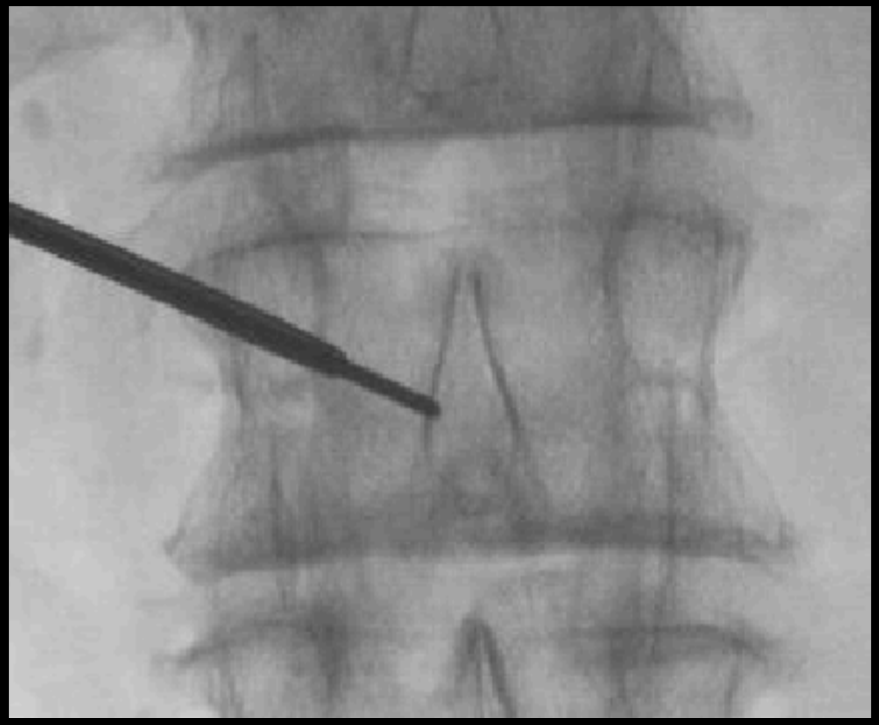


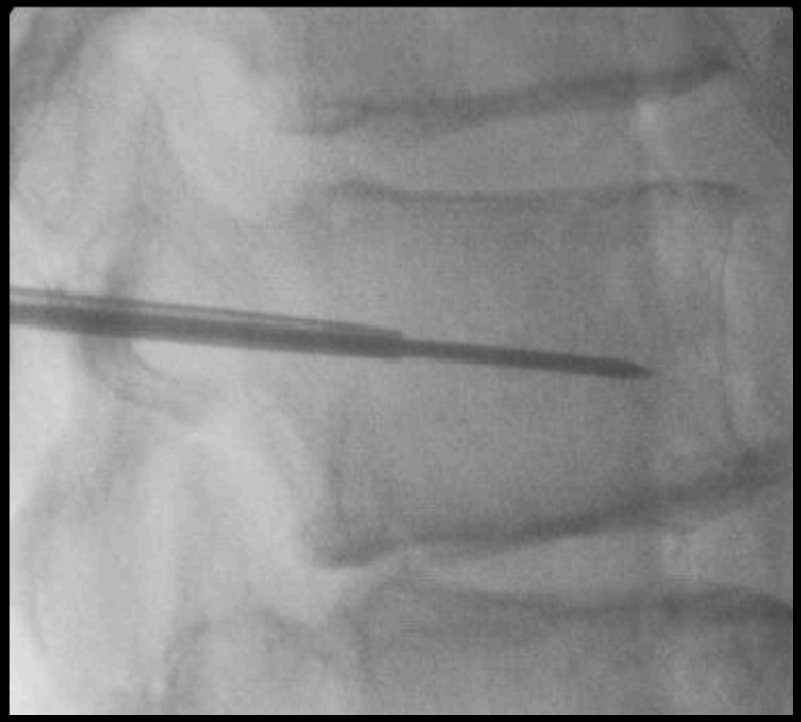


KYPHOPLASTY

- ***PROCEDURE OF THE KYPHOPLASTY:***

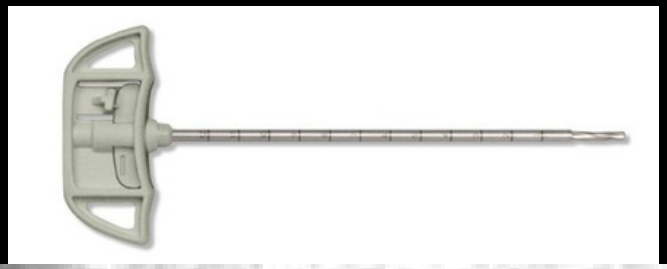
  -A needle is placed in the vertebral body

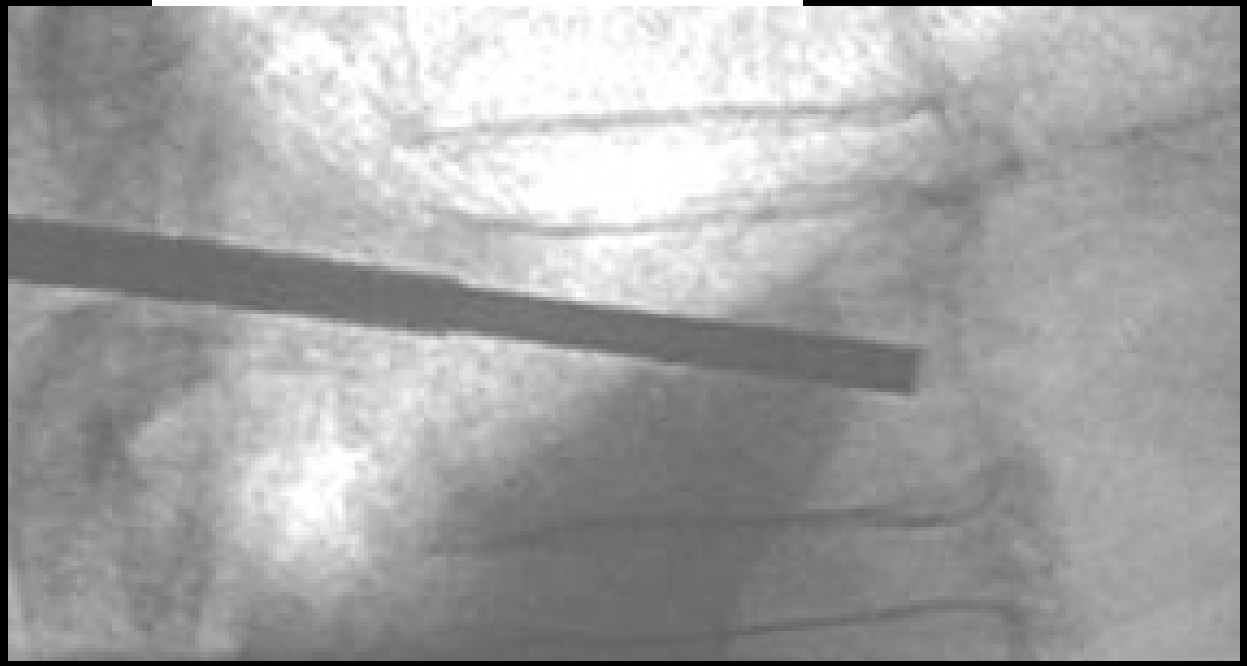




KYPHOPLASTY

- *The hole made by a needle under Flouroscopic control*

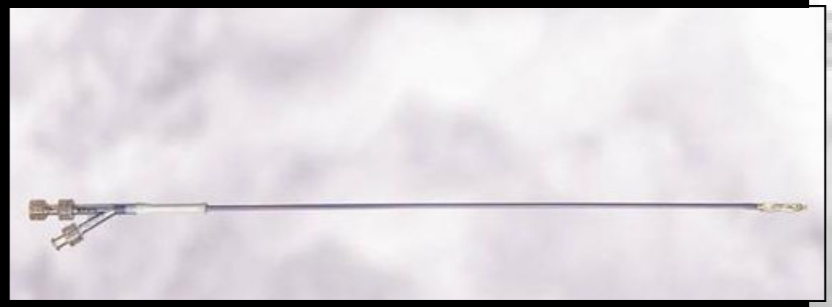


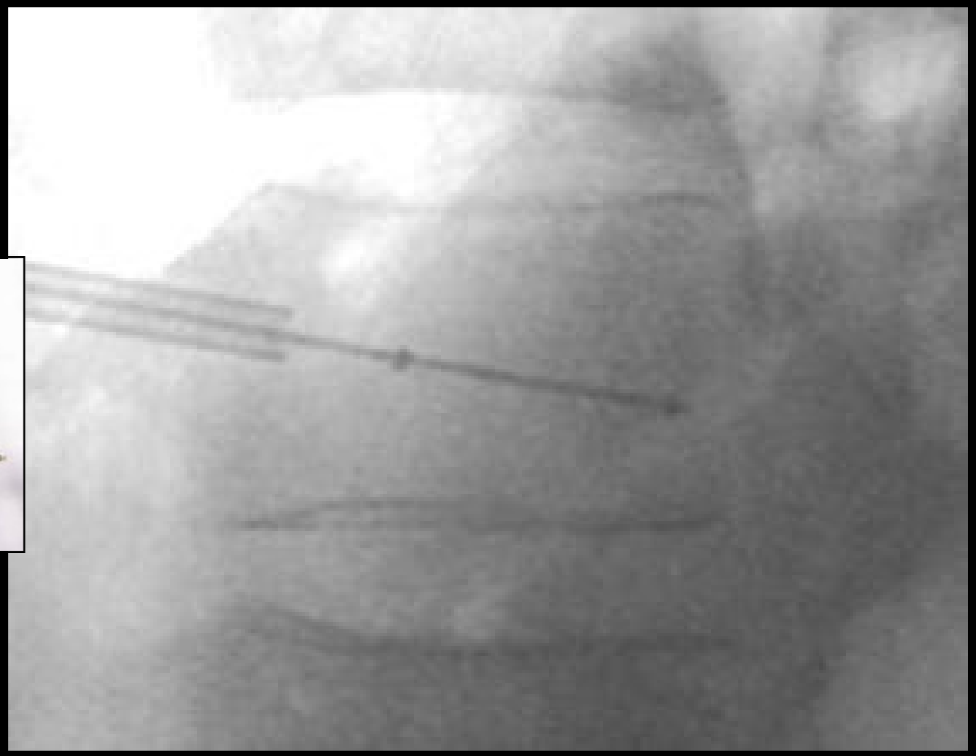


KYPHOPLASTY

- ***PROCEDURE OF THE KYPHOPLASTY*:**

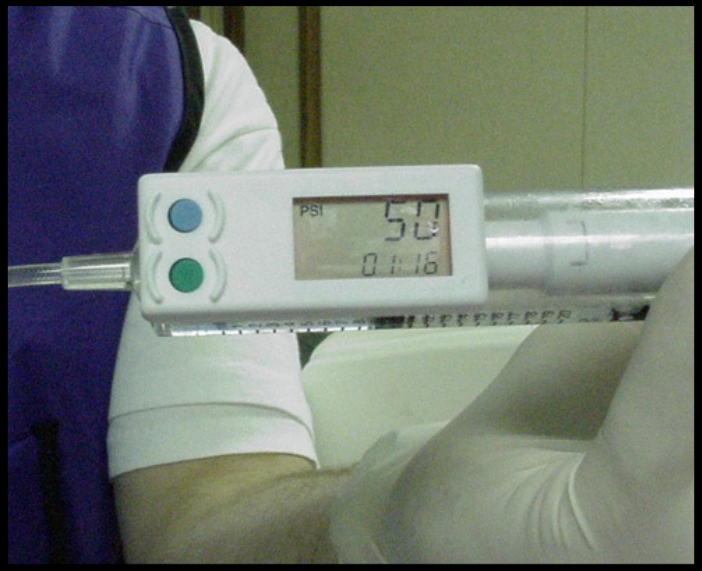
  - The balloons are introduced into the tunnels

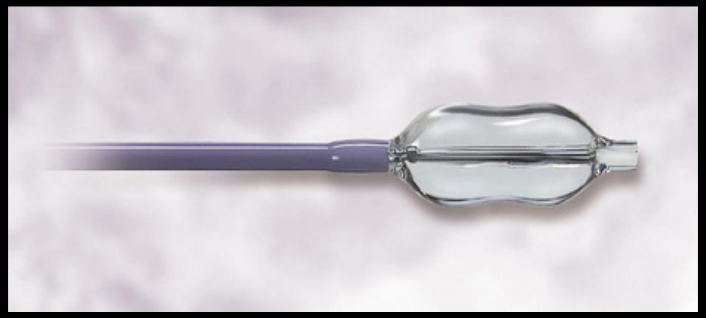


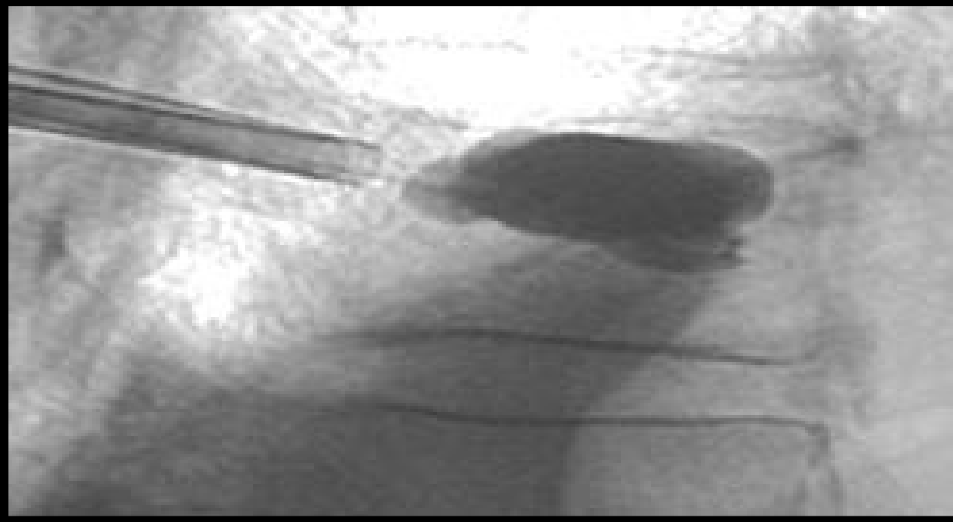


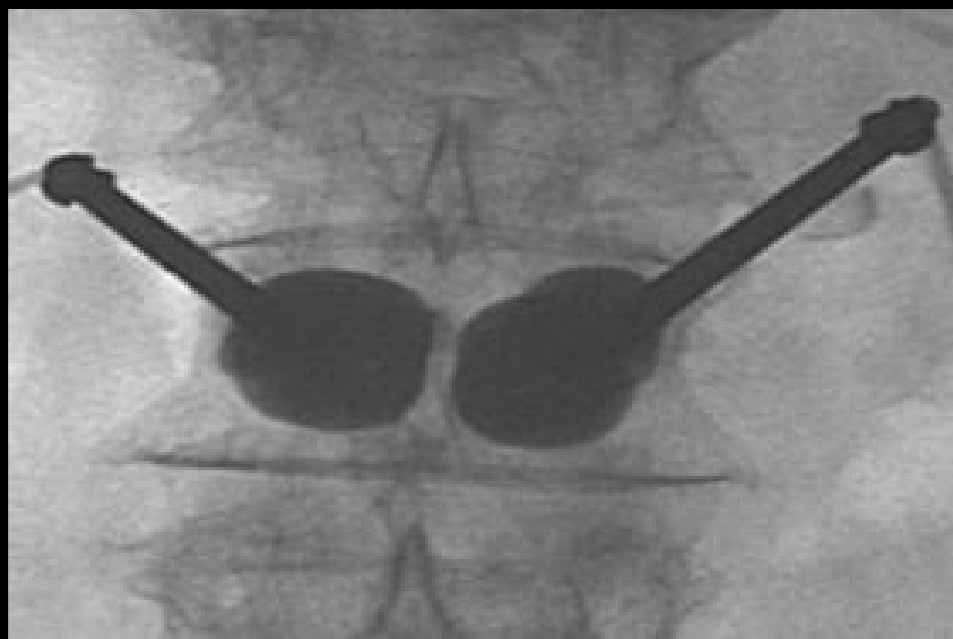
KYPHOPLASTY

- balloonsinflatedsimultaneously





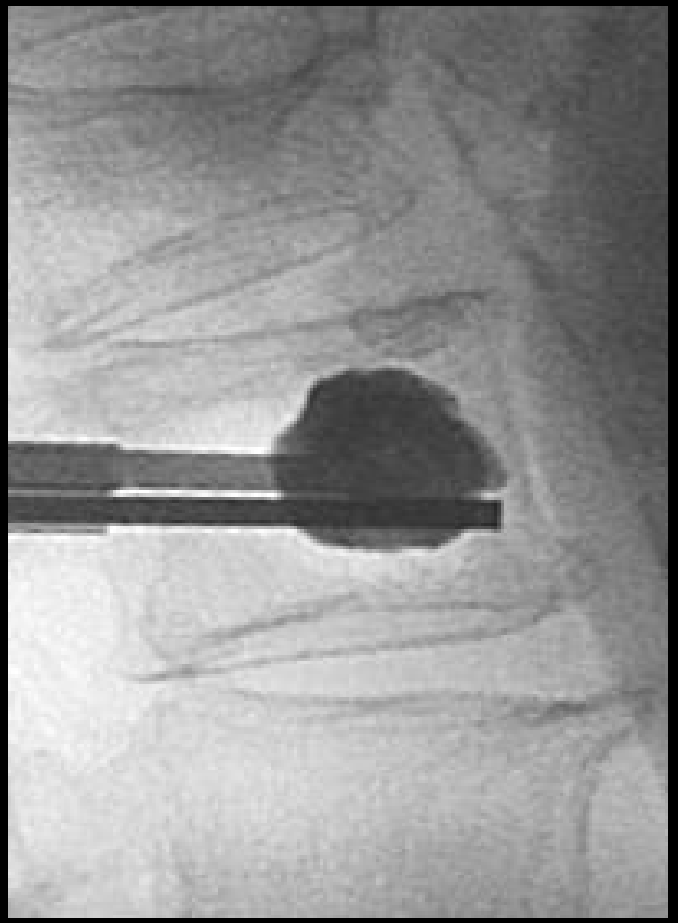




KYPHOPLASTY

- ***PROCEDURE OF THE KYPHOPLASTY:***

- The balloons are deflated
  then the cement is injected under flouroscopy control in the new cavities formed by the balloon.
- The filling is observed
  under fluoroscopy
  to and fro



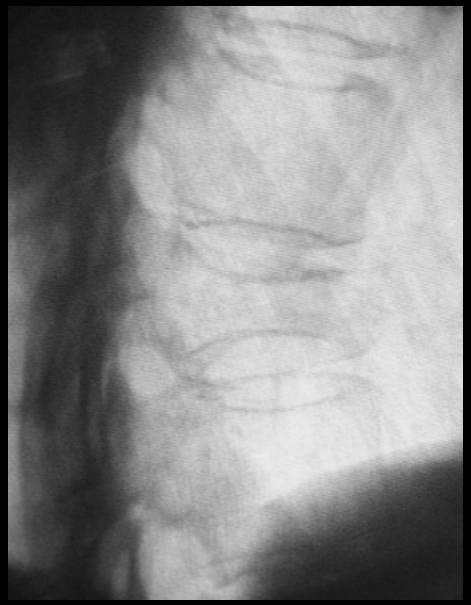
KYPHOPLASTY

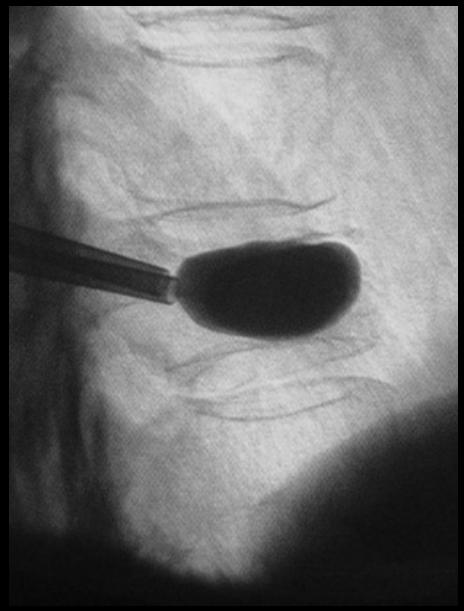
Patient: 79 YO Female
Diagnosis: Primary osteoporosis

Fracture :

T-11, 7 weeks old

Courtesy of James Hamada, M.D., Torrance, CA



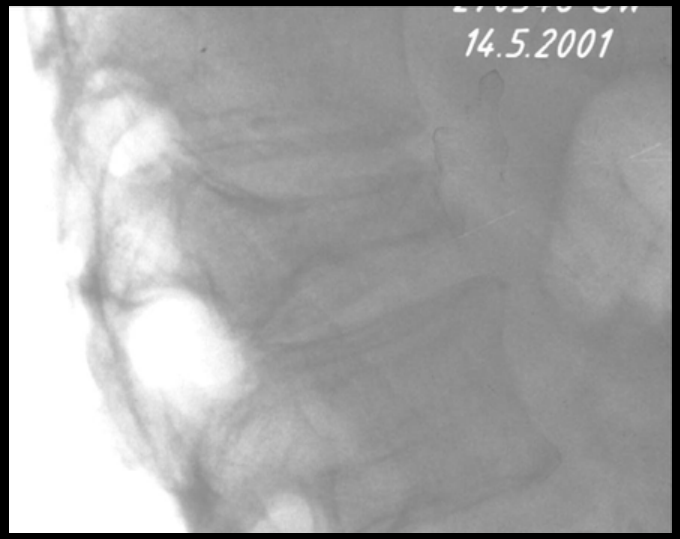


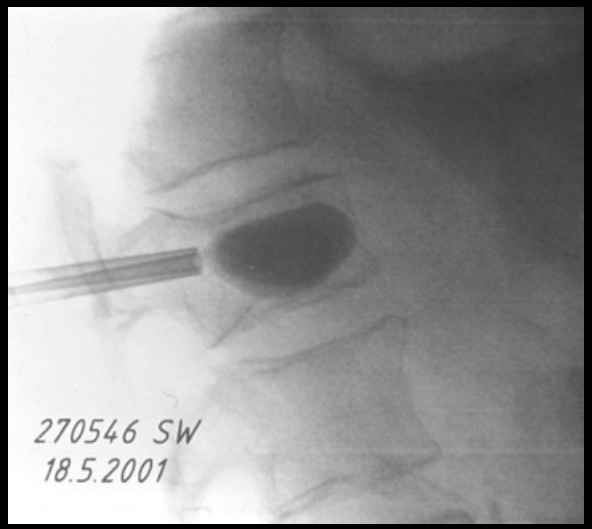
KYPHOPLASTY

Patient: 55 YO Male

Diagnosis: Secondary Osteoporotic Fracture :

Courtesy of Ulrich Berlemann, M.D., Germany

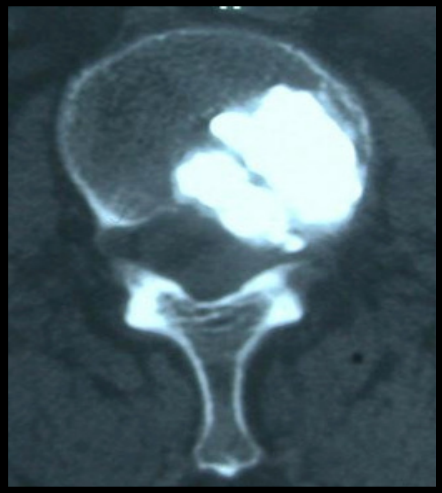


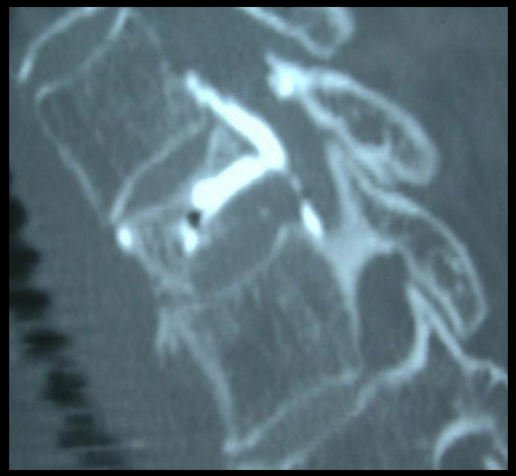


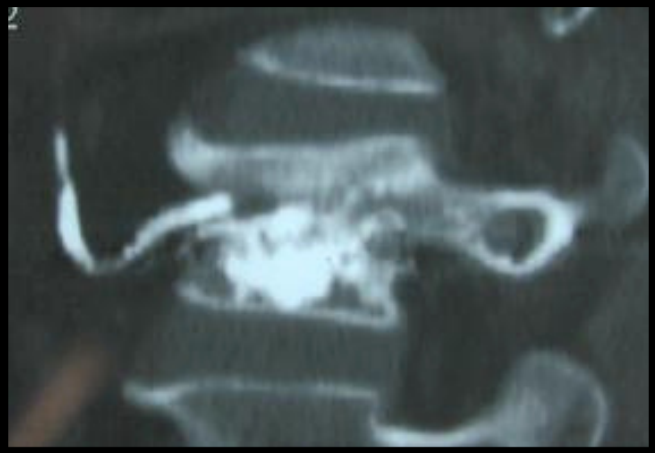
KYPHOPLASTY / VERTEBROPLASTY

- ***COMPLICATIONS:***

-Fever,inflammatory syndrom
→ NSAID
-Painrecurence due local heat
-Compression:
spinal cord / nerve root
(foramen)
-Veinous Thrombosis :
cimentvery liquid





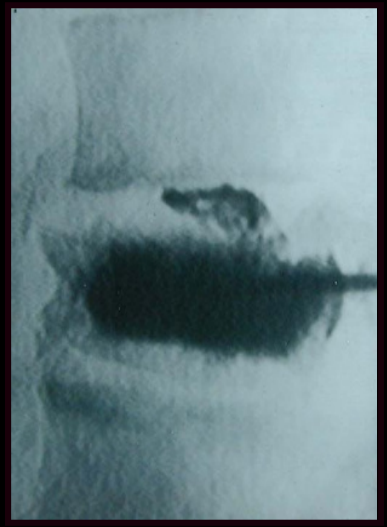


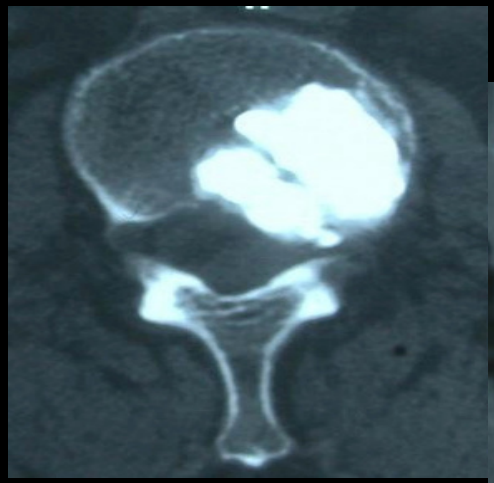
KYPHOPLASTY / VERTEBROPLASTY

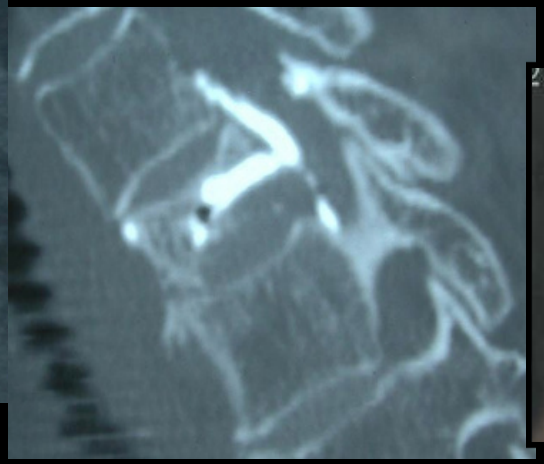
- ***COMPLICATIONS :***

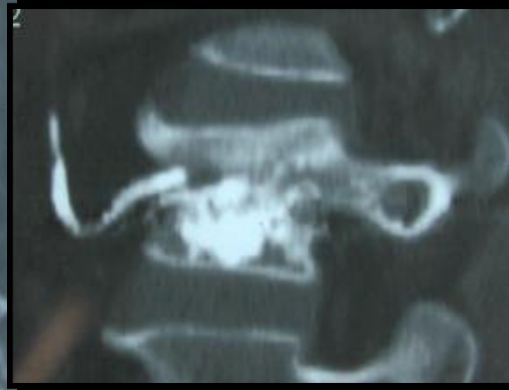
- post vertebroplasty CT shows a leakage of the ciment inaboutmorethan70%ofcases

- 5 to 7,5 % of these cases are symptomatic, usually well tolerated.









KYPHOPLASTIE

•COMPLICATIONS of KYPHOPLASTY:

- *The leakage of the ciment in the kyphoplasty is about 9 %. No symptomatic complication*

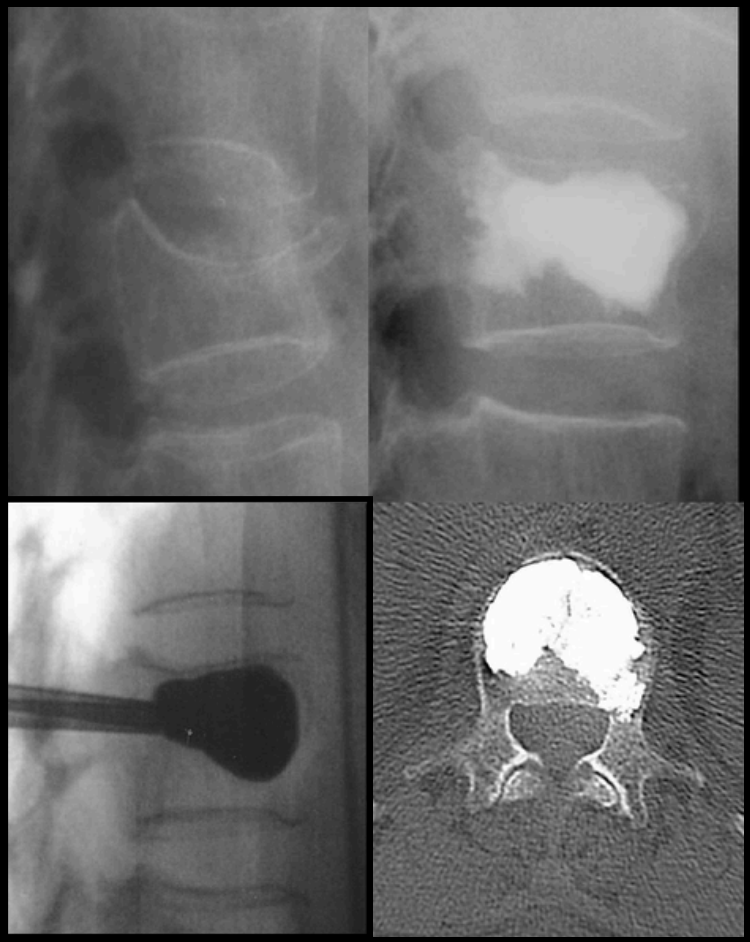
Has been reported.

- *This low rate is due to:*

  - The best control of filling of the cavity made by the ballon.

  -using of an ciment less fluid

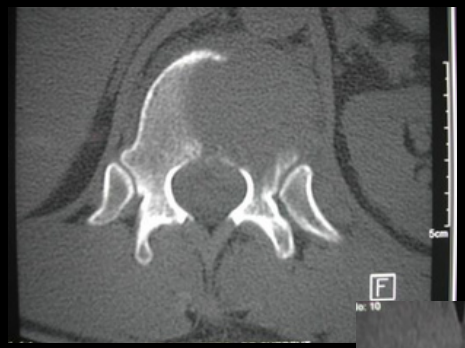
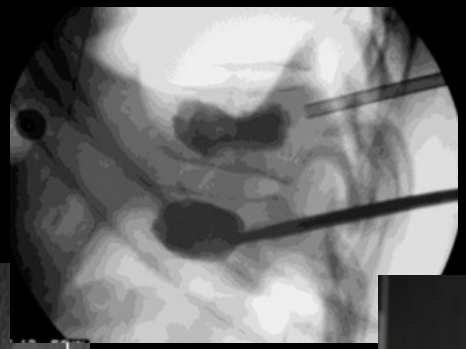
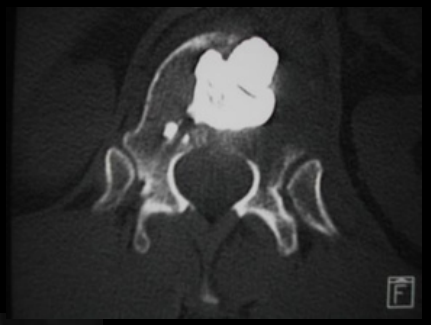
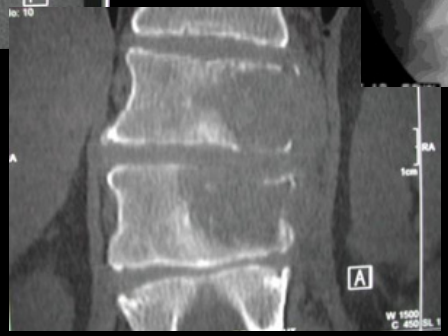
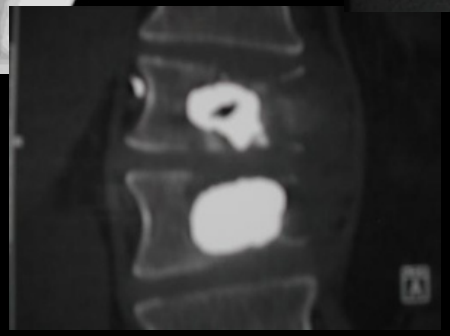
  - and low injection pression.



KYPHOPLASTY VERSUS VERTEBROPLASTY

CONCLUSION:

- ***Thevertebroplasty****constits aremarkable progression in the manegment of malignent or symptomatic osteoporotic vertebral fractures .*
- ***The kyphoplasty*** *shows low complications rate other than the vertebroplasty in case of osteolytic lesions with cortical destruction.*

KYPHOPLASTY VERSUS VERTEBROPLASTY

CONCLUSION:

-The anagesic and fonctional effects is similar in the two techniques.

-Actuelly, there is comparesion study of these tow procedures.

-The resultats of the kyphoplasty is more discutable , in our experience, the restoration of the vertebral body height was observed in 2 cases of 66.