

# **Vertebroplasty:**

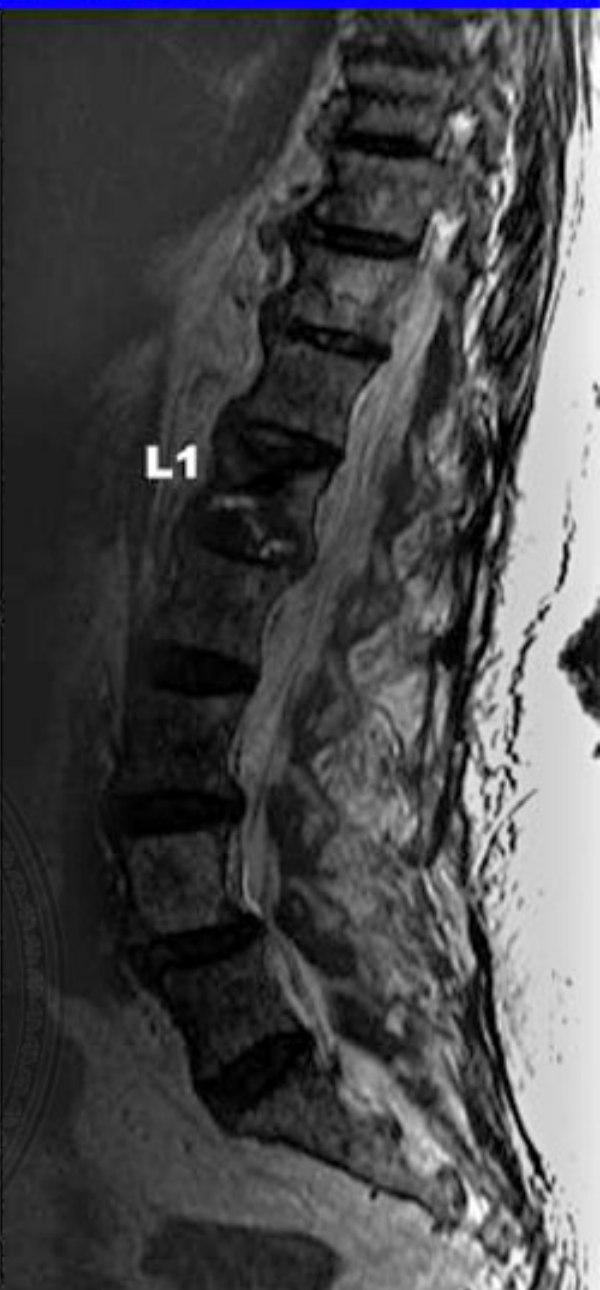
**Physical examination, plain film and bone scan  
for pre-operative evaluation  
and correlation with MRI**

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## Materials and Methods

- 20 patients with 38 osteoporotic compression fractures
- 68 years (50-93)
- All patients had physical examination, plain film, bone scan, MR imaging before vertebroplasty
- MR imaging and successful outcome gold standard.

## PE, plain film and MR in agreement - 53%





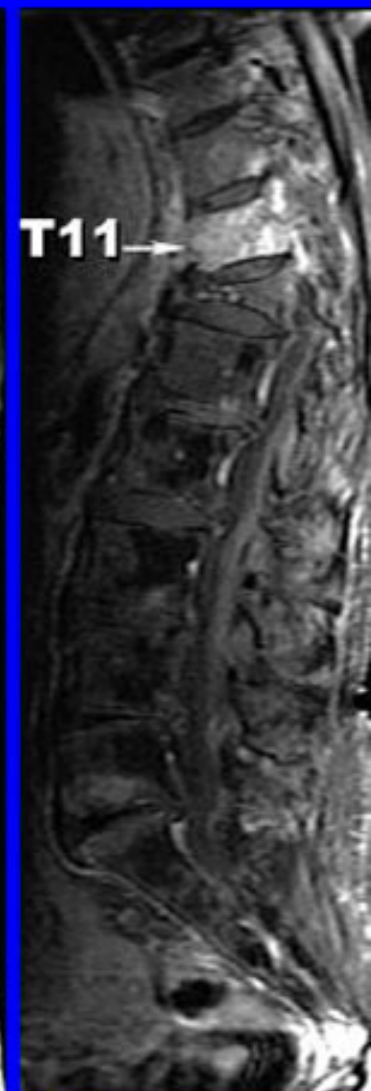
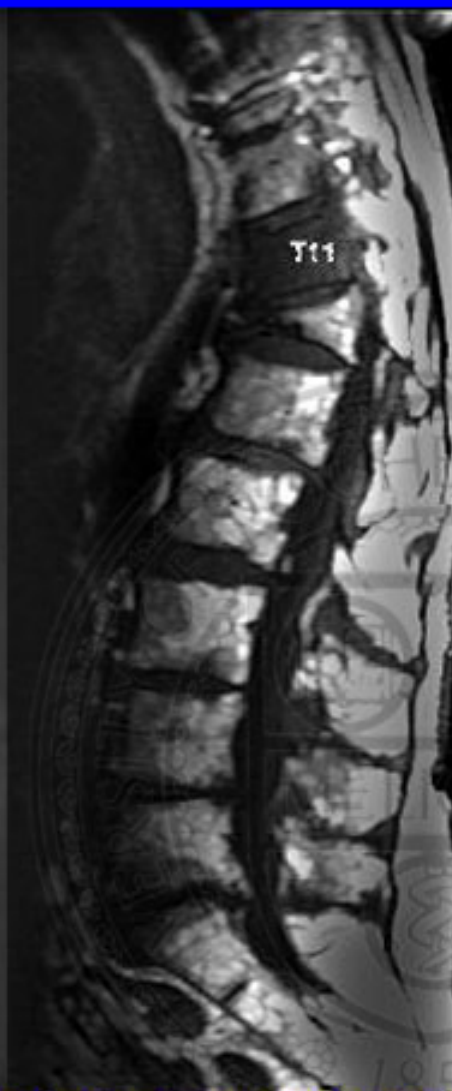
## Plain film misleading - 32%

Plain film

T1

T2

Contrast

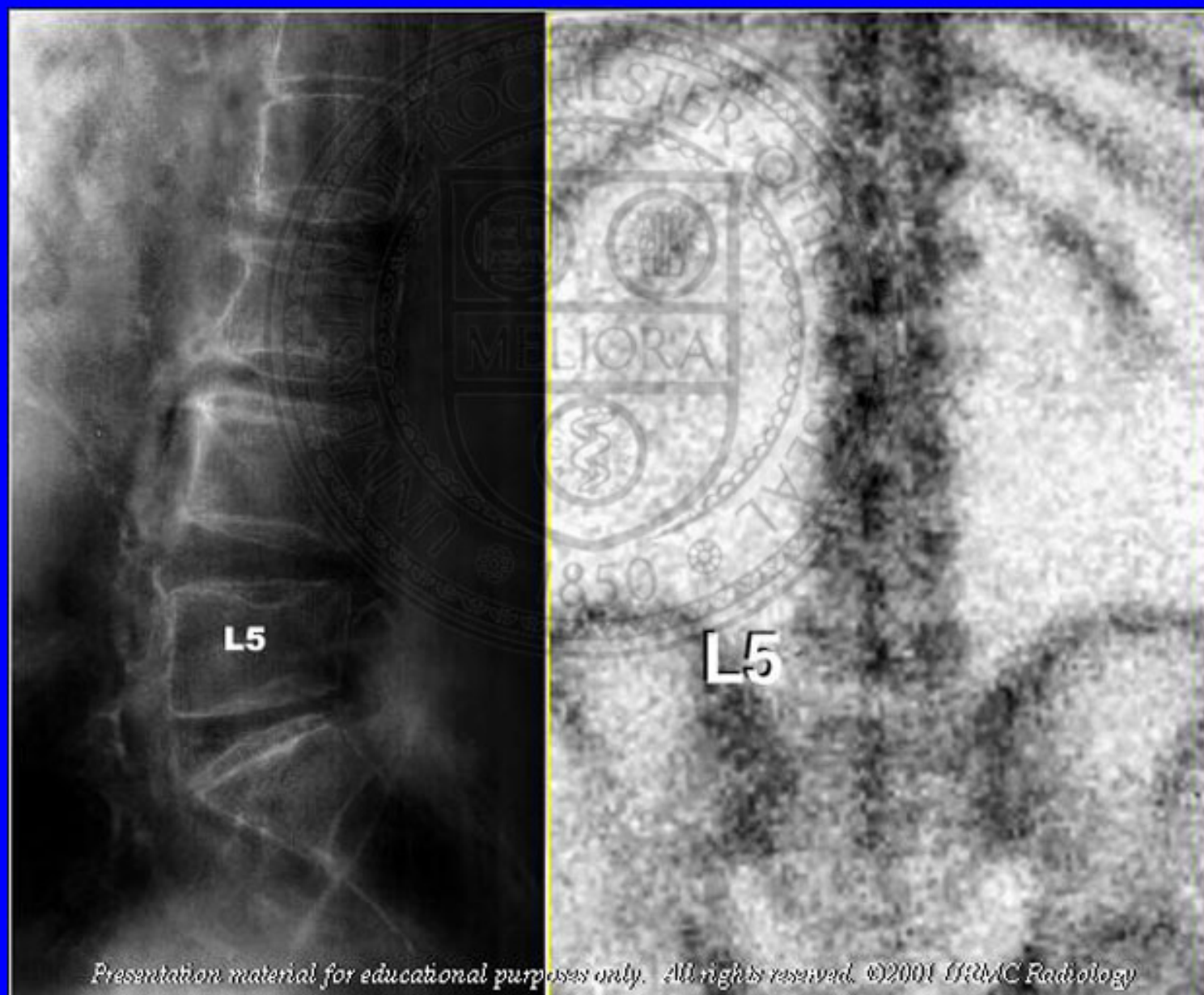


## Plain film non diagnostic - 16%





## Plain film and bone scan non diagnostic - 11%



# Results

- **Plain film**
  - correct 53%
  - misleading 32%
  - non-diagnostic 16%
- **Bone scan**
  - correct 89%
  - non diagnostic 11%

## Conclusion

- Physical examination and plain films can be misleading as to which compression fracture is the source of the pain.
- Bone scan occasionally does not show the acute compression fracture.
- Plain film and bone scans did not show any fractures that were not seen on MRI
- We recommend MRI as the prime imaging modality for planning of vertebroplasty.