

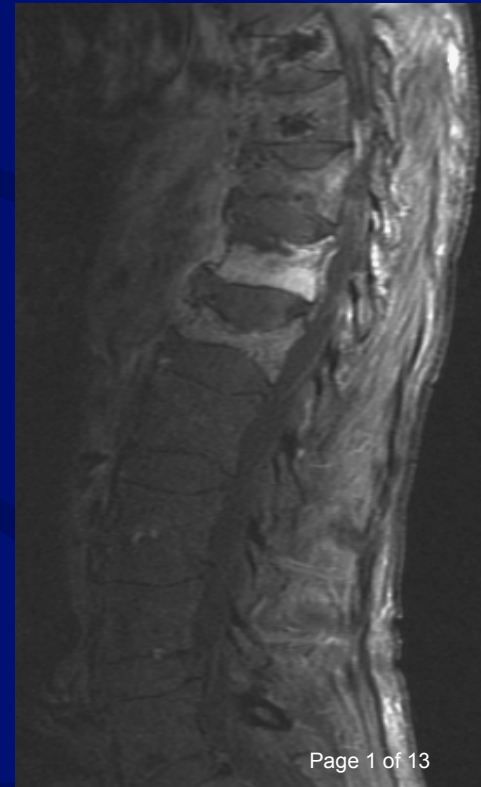
# Vertebroplasty for a New Fracture Has the Same Prognosis as the Initial procedure

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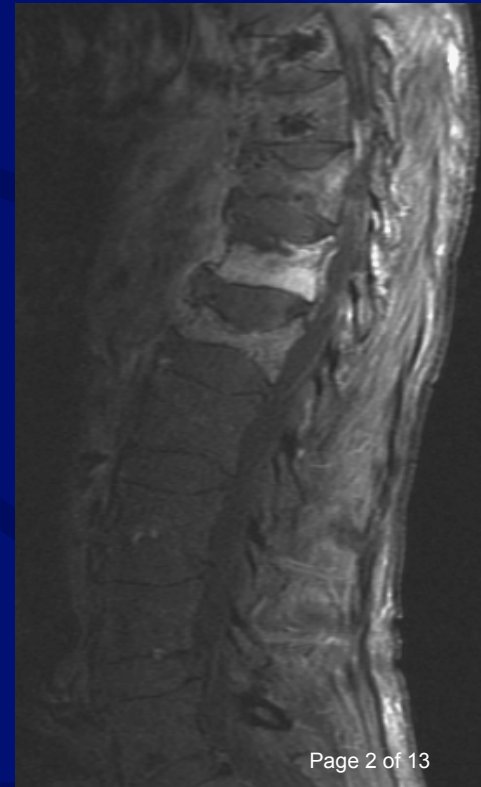
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# Background

- Approximately 80% success rate.
- Many patients return with new fractures after the procedure.



# Study purpose

- Assess outcome of subsequent vertebroplasties for new fractures in patients who were treated with vertebroplasty.

# Patients

- 18 females
- 18 males
- Mean age 75 years (46 to 93 years)
  
- Initial procedures 36 (63 levels)
- Subsequent procedures 15 (21 levels)

# Etiology of vertebral fractures

- Osteoporosis 29 patients
- Metastasis 5 patients
- Multiple myeloma 2 patients

# Evaluations

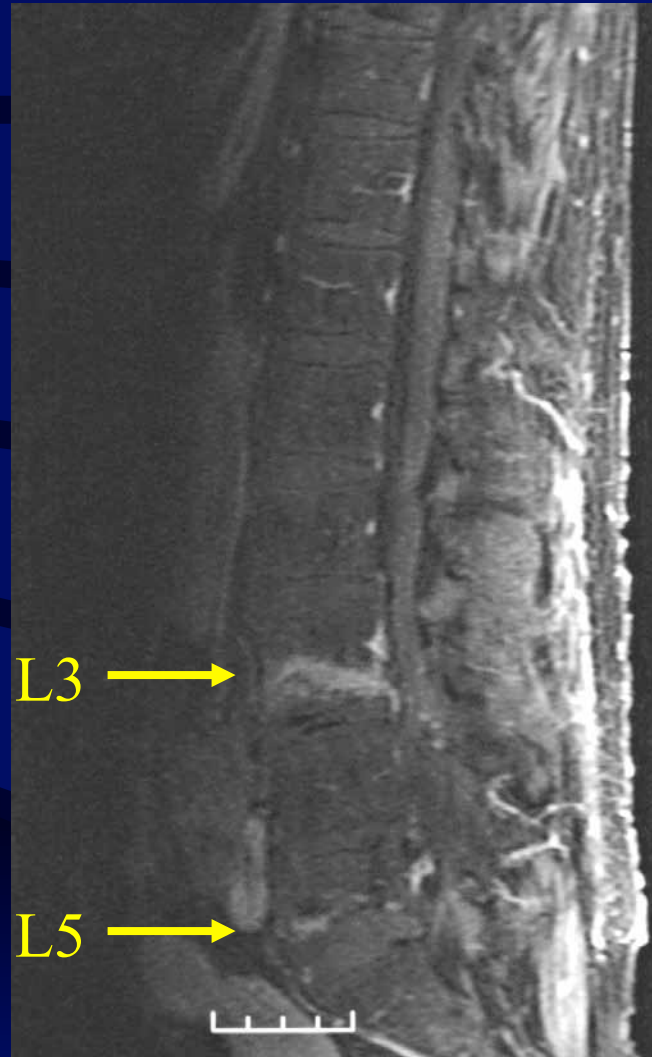
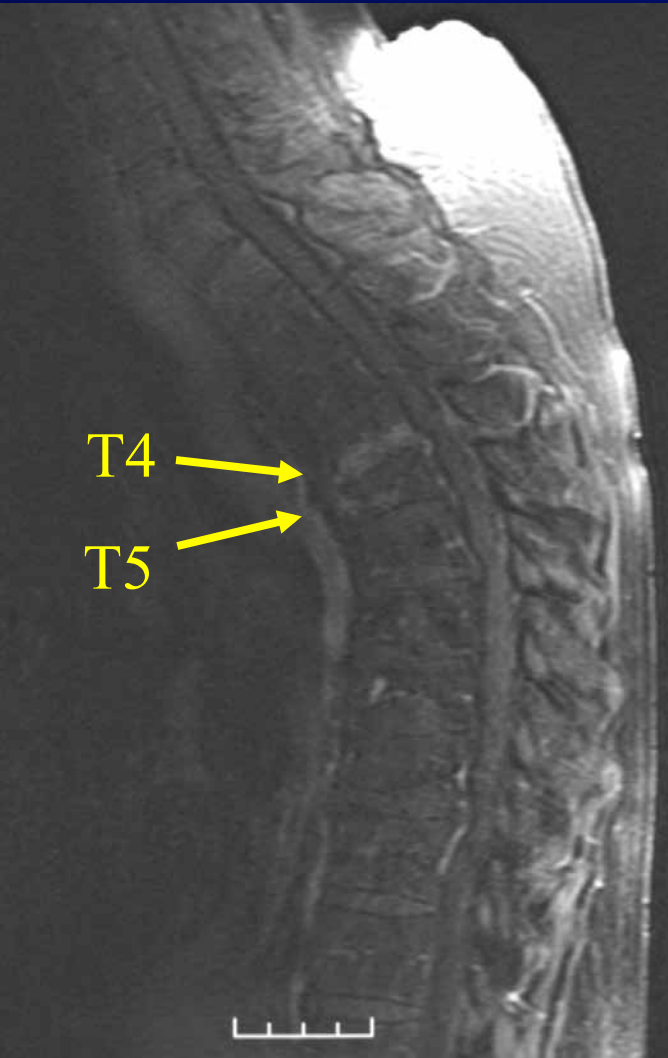
- Pain                    0 (no pain) ↔ 6 (extreme)
- Medication            0 (no meds) ↔ 4 (IV narcotics)
- Mobility                1 (ambulatory) ↔ 4 (bedridden)

*Adopted from O'Brien et al. AJNR 2000; 21:1555-58*

# Outcome assessment

- Successful      No to mild residual pain
- Improved      Decreased pain
- Failure      No change or worse

# 68 y.o. male with COPD on steroids

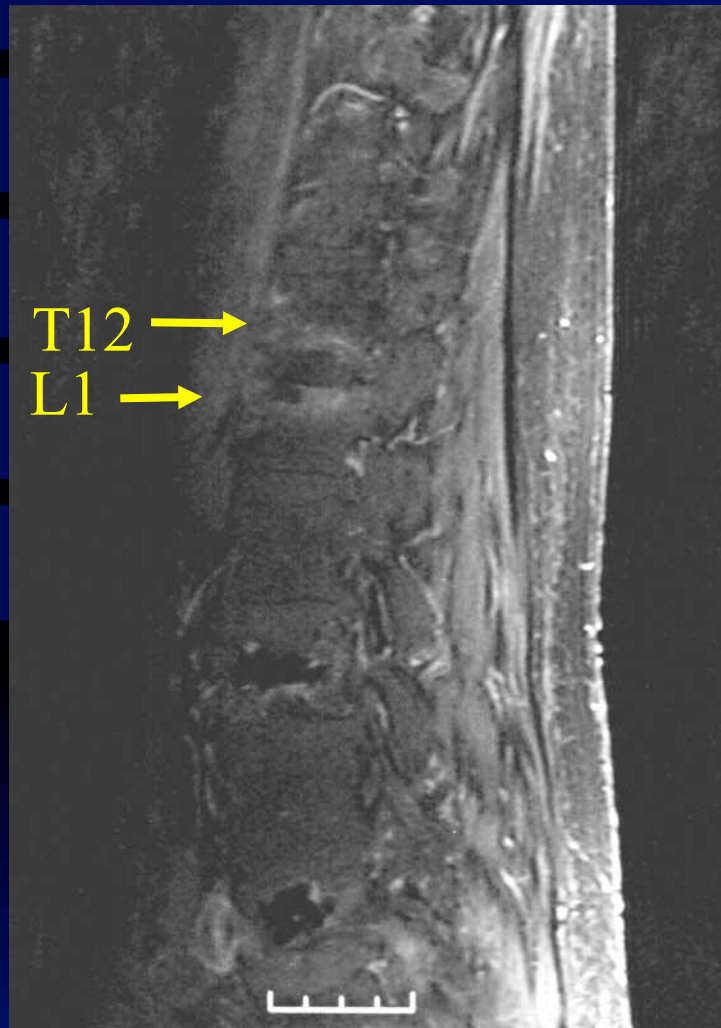


T1W post Gd

Post op CT



# 2 months after first procedure



T1W post Gd



Post op CT

## After 4 procedures



# Results

Outcome	Initial N=36	Subsequent N=15
Successful	72 %	73 %
Improved	19 %	27 %
Failure	8 %	0 %

# Pre vs. Post

	Pain	Medication	Mobility
Initial Procedure	4.9 → 1.6*	2.7 → 1.3*	2.6 → 1.8*
Subsequent Procedure	4.3 → 1.3*	2.7 → 1.1*	1.9 → 1.1*

*Wilcoxon rank sum test:  $p < 0.05$*

# Conclusion

Vertebroplasty for a new fracture has  
the same prognosis as the initial  
procedure