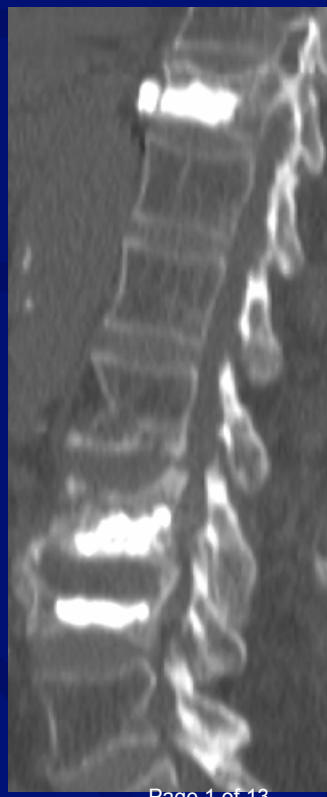
Vertebroplasty can reduce pain and improve mobility

Mayumi Oka, MD

P-L Westesson, MD, PhD, DDS

University of Rochester



Background

Vertebral compression fracture

influences quality of life

- Pain
- Decrease mobility
- Side effects from pain medication
- Kyphotic deformity

Purpose

- To evaluate effect of vertebroplasty on
  - Pain
  - Mobility
  - Medication usage

Materials and methods

- 18 females
- 18 males
- Mean age 75 years (46 to 93 years)

- 51 procedures (84 levels)

Etiology of vertebral fractures

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

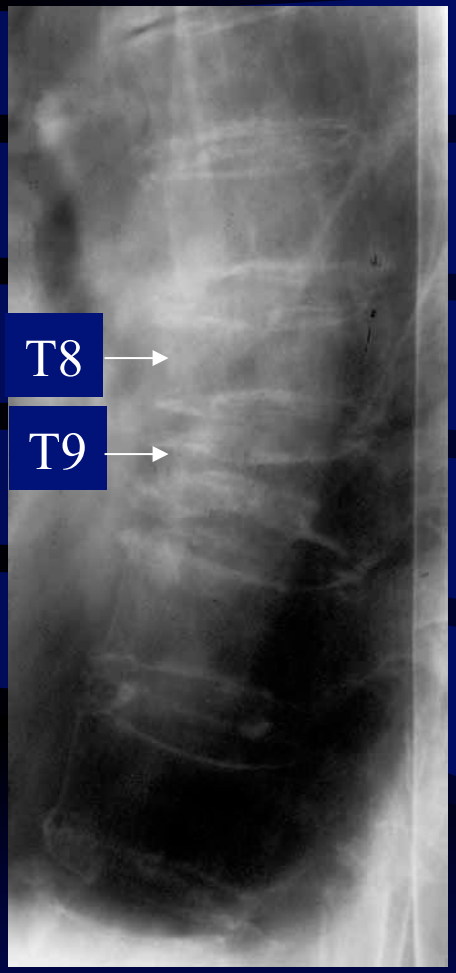
Evaluations

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

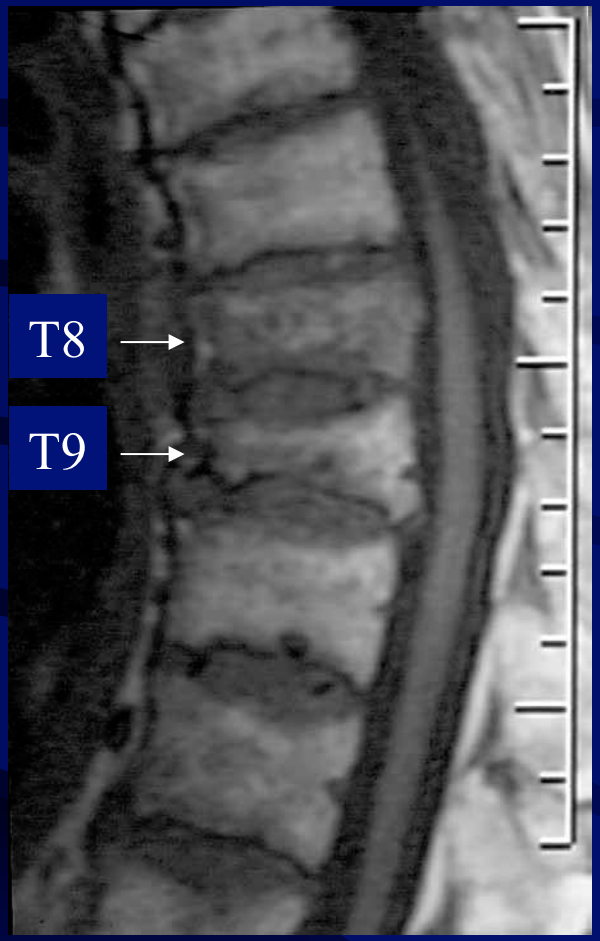
Adopted from O'Brien et al. AJNR 2000; 21:1555-58

Outcome assessment

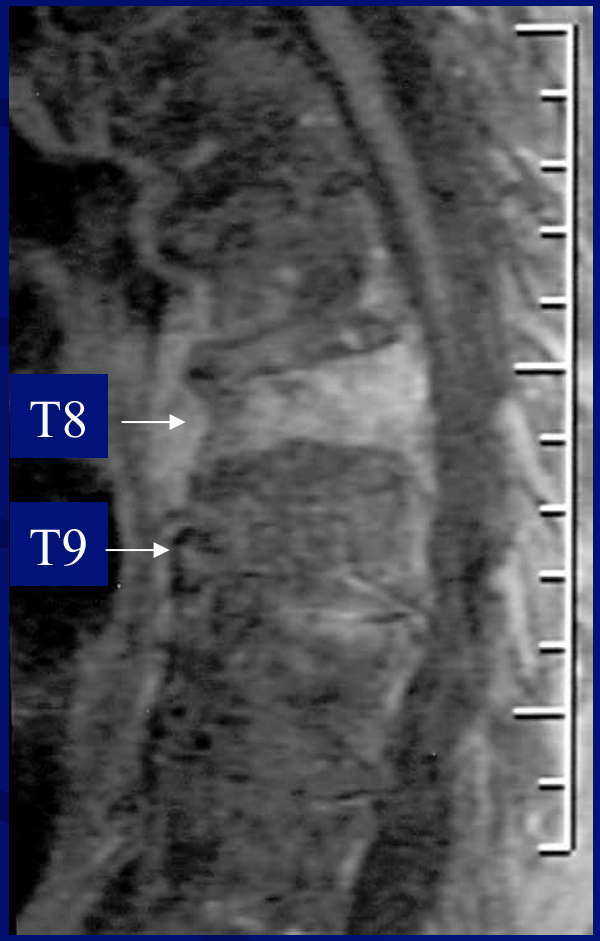
- Successful — No to mild residual pain
- Improved — Decreased pain
- Failure — No change or worse



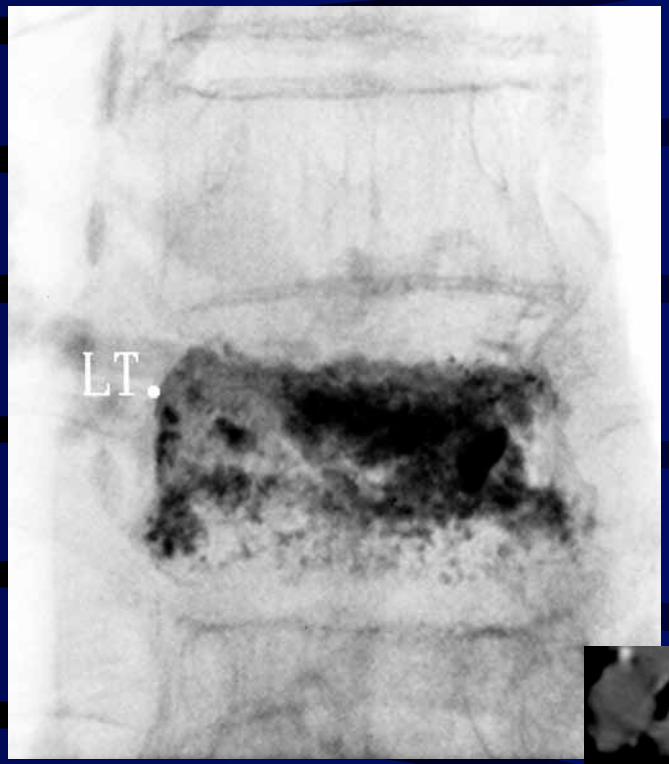
Plain film



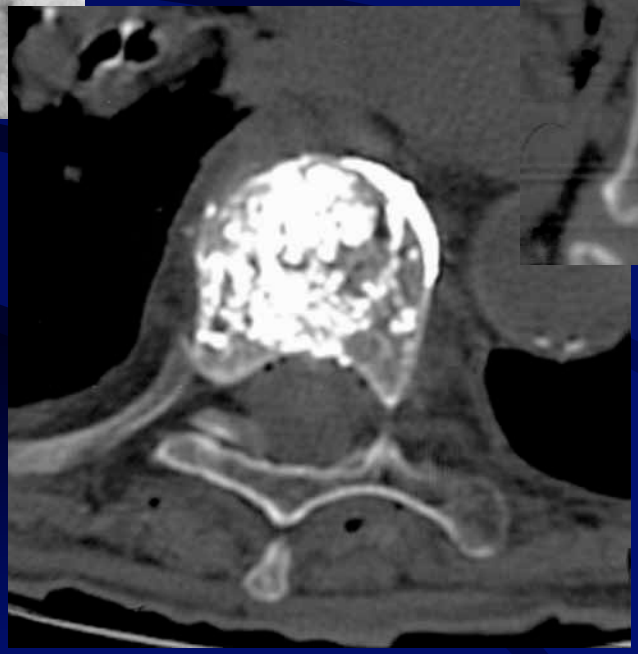
T1W



T1W post Gd



Completed vertebroplasty



Post op CT

Results

- Follow-up 5 months (1 wk to 25 mos)
- Overall outcome of vertebroplasty

Successful	72.5 %
Improved	21.6 %
Failure	5.9 %

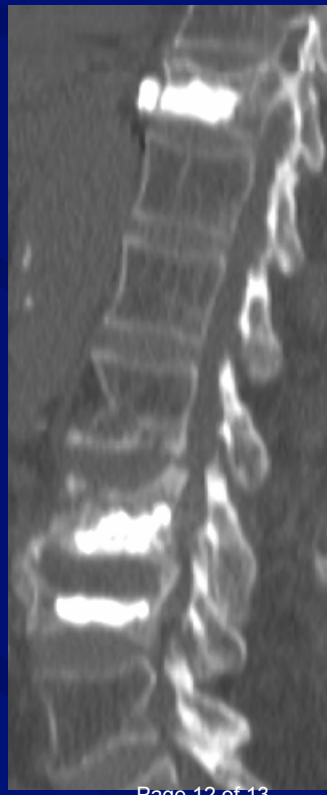
Pre vs. Post procedure

	Pre	Post	p-value
Pain	4.7	1.6	<0.0001
Pain medications	2.7	1.2	<0.0001
Mobility	2.4	1.6	<0.0001

Wilcoxon rank sum test

Conclusion

Vertebroplasty can reduce pain and improve mobility.



Mobility