

Vertebral Augmentation in the Treatment of Non-Osteoporotic Compression Fractures in 792 Patients with Multiple Myeloma.

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Disclosures

- None



- Founded 1989, Bart Barlogie, MD, PhD

Epidemiology

- 10% hematologic malignancies, 1% all
- Incidence 3-4/10⁵, 20,000/year US
- 100,000 US patients in treatment
- 3:2 Male to female ratio
- African-Americans increased risk

Multiple Myeloma

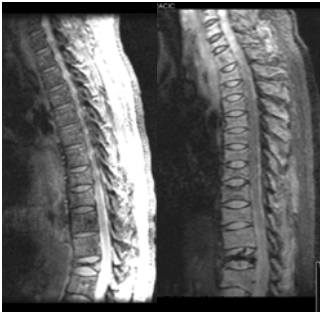
- Clonal neoplasm of plasma cells
- Bone marrow failure
 - Anemia
 - Immune dysfunction
- Monoclonal Protein
 - Suppression of normal Ig production
 - Renal insufficiency

Bone Destruction

Osteoclast&Osteoblast
“Un-coupling”

SEM courtesy of Dr. Arnett, LLC

Bone Destruction



Objective

- Distribution and Extent Vertebral Fractures
- Efficacy of Vertebral Augmentation
 - Pain
 - Analgesic Usage
 - Activity

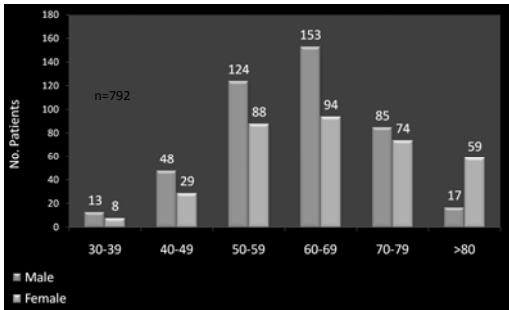
Material & Methods

- 792 consecutive MM patients
- January 2001 through May 2007
- Prospective, IRB-approved study

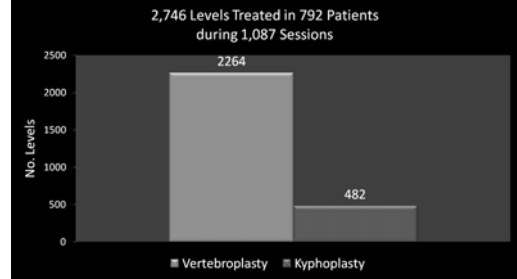
Materials and Methods

- Pain
 - Visual Analog Scale (0 - 10)
- Analgesic Usage
 - Class, Frequency, Dose
- Activity

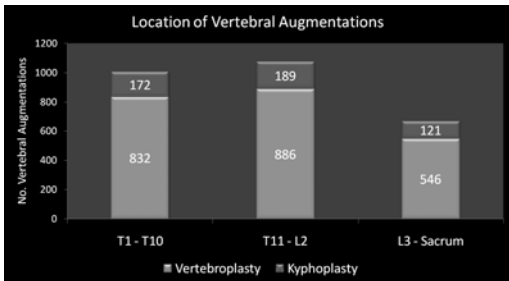
Results



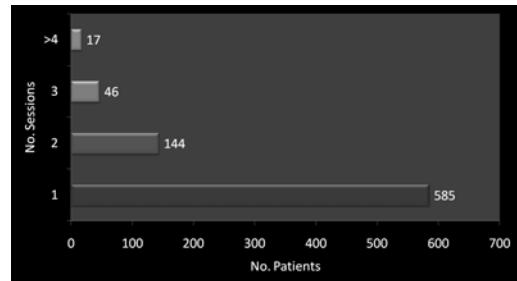
Results



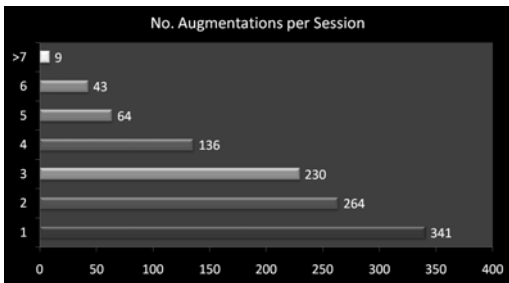
Results



Results

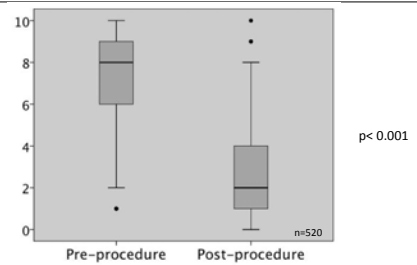


Results

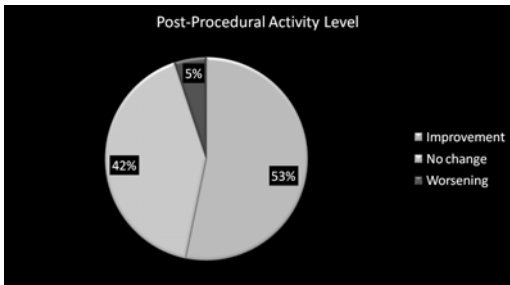


Results

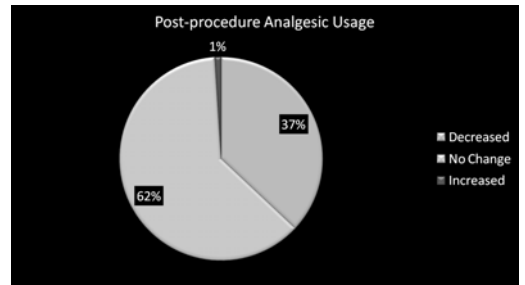
• Pain Assessment



Results

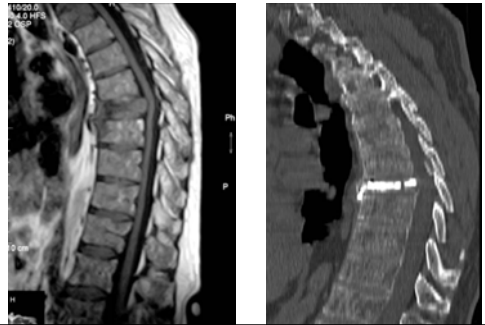


Results

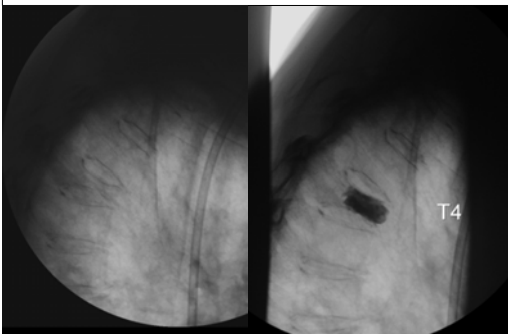


Selected Cases

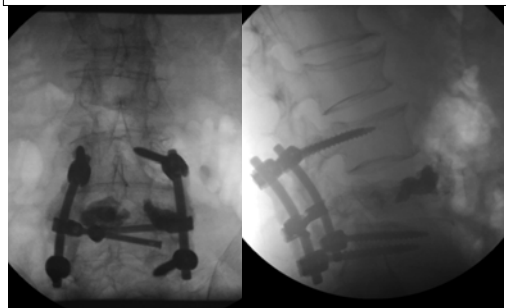
Retropulsion



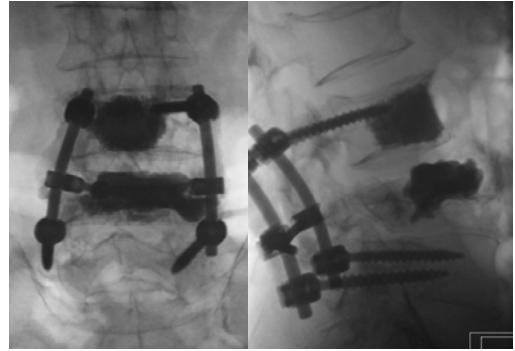
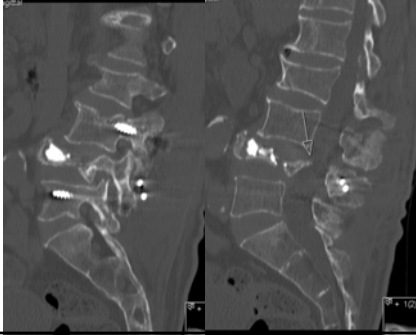
Height Restoration



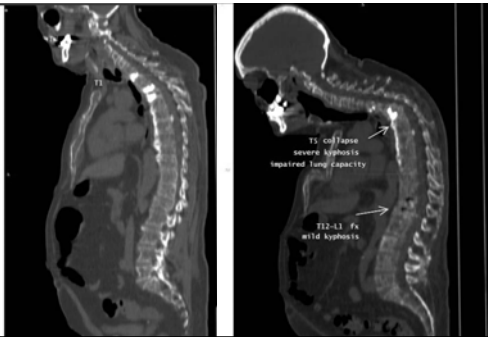
Failed Back Surgery



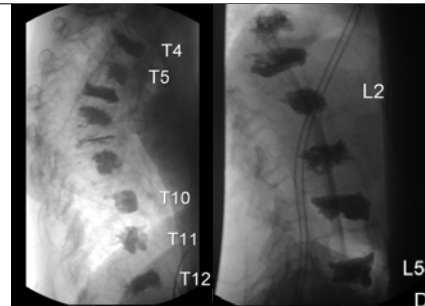
Failed Back Surgery



Severe Debilitation



Extensive Treatment



14 Levels Treated in 2 Sessions

Conclusions

- MM is a complex disease requiring tailored treatment plans
- Vertebral Augmentation reduces pain, improves activity, and reduces analgesic use.