

**Title of Abstract:** Biologic Percutaneous Vertebral Augmentation and Reconstruction for Vertebral Compression Fracture with Morcelized Bone Graft

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**Abstract:** This presentation is to discuss the percutaneous outpatient vertebral augmentation (VA) and reconstruction with a polyethylene intravertebral mesh and biologic morcelized bone graft, the surgical indications, operating technique, case illustrations and clinical outcome. In the past vertebroplasty and kyphoplasty have provided excellent pain relief for vertebral compression fracture (VCF), but with a high incidence of complication; i.e., leakage of Polymethylmethacrylate (PMMA) into spinal canal or vasculature, cardiopulmonary complication, and adjacent vertebral fracture.

This percutaneous VA system, is designed, developed, and used for VCF treatment without above complications, and is a true biologic vertebral reconstruction. An multi-strand polyester mesh or sac to be packed with specially ground bone chips or morcelized bone chips inside the mesh device to create a hyperdensified graft pack for restoring height resulting in pain relief.

This minimally invasive outpatient percutaneous biologic VA provides an efficacious and controlled delivery mechanism to stabilize and treat painful osteoporotic, traumatic and neoplastic VCF. In addition it can easily be used as an excellent intravertebral spacer and for intravertebral spinal fusion/fixation.

## References

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