Percutaneous minimal invasive treatment with vertebral body stenting in traumatic amyelic vertebral fracture
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Introduction: Over the past decade, percutaneous kyphoplasty has been increasingly used as treatment of choice for osteoporotic vertebral compression fractures. Since a year we extended this treatment also in selected traumatic amyelic vertebral fracture using a novel method of “stenting” the vertebral body.

Objectives: To evaluate the safety and efficacy of vertebral body stenting to aim reduction and cement augmentation, in the treatment of traumatic vertebral compression fractures.

Methods: Patients with A1.2-A1.3 compression fracture were selected for the VBS treatment, the treatment efficacy was determined by the assessment of change in vertebral body height and visual analog scale between preoperative, postoperative, and the latest follow-up. Complications were recorded.

Results: All selected patients had immediate and significant improvement in back pain after being treated with percutaneous VBS. In 70% of the vertebral bodies VBS restored 47% of the lost height. There were no major complications related directly to use of this technique, asimptomatic cement leakage occurred in 2%. During the follow-up, we didn’t find any recurrence vertebral fractures neither in treated vertebra nor in adjacent vertebral bodies.

Conclusions: The VBS was efficacious in the treatment of traumatic vertebral compression fractures. Vertebral body stenting is associated with early clinical improvement of pain and function as well as restoration of vertebral body height in the treatment of traumatic compression fractures.