

Percutaneous pedicle screw fixation combined with percutaneous vertebroplasty for the treatment of thoracolumbar burst fracture in elderly patients

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Background

Thoracolumbar burst fracture

- Posterior fixation
- Anterior fixation
- Percutaneous vertebroplasty (PVP)
- Conservative treatment



Which is the best treatment?

Background

Percutaneous pedicle screw (PPS) fixation

Less invasive than traditional pedicle screw fixation



Ideal treatment especially for elderly patients?

Purpose

To evaluate the efficacy and safety of PPS fixation combined with PVP for the treatment of thoracolumbar burst fracture in elderly patients

Material & Methods

30 patients

Thoracolumbar burst fracture without neurologic deficits

Mean age : 79 years old (70-88)

Surgery: PPS fixation (3 levels above and 2 levels below)
combined with PVP using hydroxyapatite



Assessment

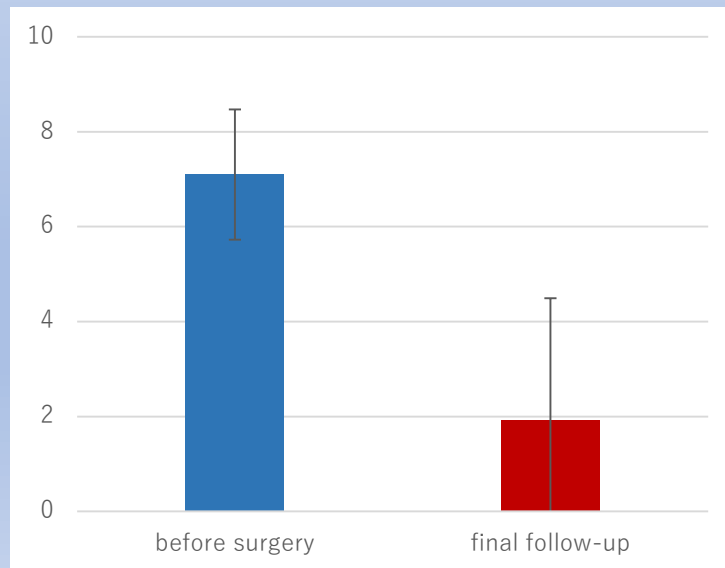
- Operative time
- Intra-operative blood loss
- Time needed to first walk
- Visual Analogue Scale (VAS) scale
- Radiological measurements (CT sagittal section)
 - Central height and kyphotic angle of vertebral body



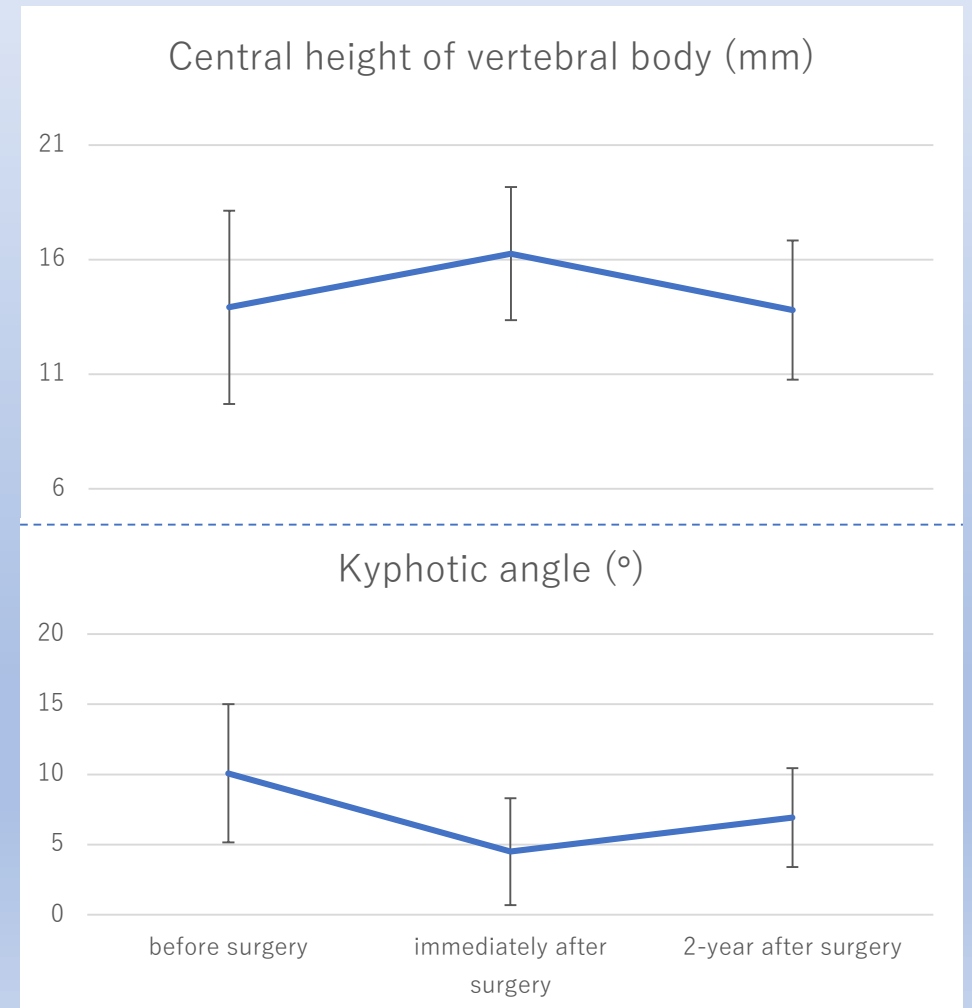
Results

follow-up	34 months (24-53)
operative time	148 minutes (105-243)
intraoperative blood loss	48 ml (10-330)
time needed to first walk	2.8 days (1-13)

VAS scale



Radiographic results



Conclusion

Our study indicated that PPS fixation combined with PVP is a good choice for the treatment of thoracolumbar burst fracture even in elderly patients.

Disclosure

I have no conflict of interest with regard to my presentation.