

**Introduction** Osteoporotic vertebral compression fractures (VCFs) in the elderly patient can cause significant pain and lead to restrict their daily life activities. Augmentation procedures (Vertebroplasty(VP) and kyphoplasty(KP)) have reported as a standard treatment of VCFs in cases of not responding to conservative treatment. However, the remnant radiculopathic leg pain after augmentation procedures remained persistently due foraminal stenotic change in especially lower vertebral body compression fracture. We have tried to decompress the exiting nerve root by full endoscopic foraminotomy and report our results.

**Material and Methods** 15 patients with persistent radiating leg pain after augmentation procedures of 56 patients were surveyed. We judged the radiculopathic pain of foraminal stenosis due to compression fracture by MR images and effect of nerve root block. Full endoscopic foraminal decompression was done after selective exiting nerve root block to confirm exiting nerve radiculopathic pain. All remnant pain patients were evaluated at interval of 1-2 weeks and added injection if they had pain.

**Results** Back Pain intensity using VAS (visual analog scale) was decreased, from 8.5 before augmentation procedures to 3.2 after augmentation procedures. But radiating leg pain was not changed significantly (VAS : 7.6). However, After Full endoscopic foraminal decompression, VAS of leg pain decrease from 7.6 to below 2.7. Successful outcome was determined if pain reduction exceeded 50% relief. 13 of the 15 patients (86.7%) showed successful responses.

**Conclusion** Endoscopic foraminal decompression is the one of the effective methods to decreases the persistent radiculopathic pain after bone cement augmentation in the patients with vertebral lower body compression fracture.