Background and Aims Osteoporotic vertebral compression fracture (OVCF) is a problem causing incapacitating pain, disability, and mortality. Percutaneous Vertebroplasty (PVP), a minimally invasive procedure, has resulted in immediate pain relief with decreased morbidity. Primary aim was to evaluate the quality of life (QOL) by the RMDQ (Roland- Morris disability questionnaire) Score and pain relief by 11 points NPRS (Numeric Pain Rating Scale) and vertebral height restoration and Wedge angle measurements after Percutaneous Vertebroplasty (PVP).

Methods This prospective longitudinal interventional study was conducted on patients with low back pain due to OVCF. These patients were managed by PVP and followed at one week, one , three and six months for improvement in quality of life (QOL) by RMDQ Score and pain relief using the NPR scale. The pre and post-vertebroplasty wedge angle and vertebral height at one week and six months were also compared by pre and post-vertebroplasty lateral view skiagrams.

Results Twenty-four patients were included The RMDQ score showed a statistically significant difference in post-PVP at one week (p=0.044), one (p=0.031), three (p=0.022), and six months (p=0.018). There was a statistically significant difference in the NPRS at six months showing drastic pain relief after PVP. The mean wedge angle (20.5±2.07) measurement was reduced with a statistically significant increase in anterior body height restoration from pre-PVP to six months. There was no significant change in height at the middle and posterior columns compared to Pre-PVP height.

Conclusions PVP is safe, minimally invasive pain intervention (MIPS1) for OVCF with improved QOL and restoration of vertebral height.