



<b>Title</b>	<b>Percutaneous Vertebroplasty in Severe Back Pain from Vertebral Compression Fractures - Early Assessment Briefs (Alert)</b>
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<b>Reference</b>	SBU Alert report no 2007-02. Rodriguez-Catarino M, Freyschuss B, Eckerlund I. SBU. ISSN 1652-7151. www.sbu.se/published

## Aim

To assess the scientific evidence with reference to the following question:

Is percutaneous vertebroplasty (PVP) a safe and effective treatment for severe back pain caused by: 1) vertebral compression fractures resulting from osteoporosis in cases where conventional treatment has not provided acceptable pain relief; 2) osteolytic metastases or myeloma?

## Conclusions and results

Limited scientific evidence shows that PVP is superior to conventional treatment as regards short-term pain relief and functional ability in patients with osteoporotic vertebral compression fractures (Evidence Grade 3). Complications have been reported. Scientific evidence is insufficient to determine the benefit of PVP in treating patients with vertebral metastases or myeloma. Knowledge concerning the method's long-term effects, risks, and side effects is insufficient. Randomized and blinded trials are needed to reduce the risk of overestimating the treatment effect. High-quality observational studies with extended follow-up, eg, national quality registers, are essential to determine the long-term effects and risks. The assessment does not include patients with signs of nerve or spinal cord compression.

## Recommendations

No recommendations.

## Methods

A systematic search of the literature was conducted primarily via electronic databases (PubMed and Cochrane Library) until March 31, 2007. For inclusion in the systematic review, all articles were required to meet predetermined criteria: the results of the studies should be relevant to the questions posed by the project, ie, have appropriate endpoints, follow-up period, and study design. Ethical and economic implications were considered.

## Further research/reviews required

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