The authors have conducted a very comprehensive review of the literature. The conclusions are that Vertebroplasty and Kyphoplasty clearly provide better short term pain relief that standard care in patients with recent vertebral fracture.

However the Buchbinder and Kallmes studies (and associated network meta-analysis, which attempts to extend this to KP) demonstrate that it is unclear to what extent these benefits are due to the augmentation procedure (VP or KP) or other components of the technique (such as going to theatre, having sedation, having local anaesthetic injected into the spine and so on). In other words, this could be a placebo effect.

There is nothing wrong with a placebo (it can be helpful in many areas of medicine) but when the intervention carries the risk of serious adverse effects such as embolism, spinal cord compression and so on (as these interventions do), then the risk benefit is doubtful.

Therefore my opinion is that these interventions cannot be supported as routine treatments of patients in NHS Scotland.

I should say that we have been reviewing all this evidence lately as part of the SIGN osteoporosis guideline and the group collectively came to the same conclusion as I have outlined above.

Comment provided to Healthcare Improvement Scotland by:

I am unable to find any fault with the content or methodology of the document (though I am not qualified to assess the accuracy of the statistical analyses).

The conclusions and recommendations also appear logical and reasonable.

NICE IPG's 12 and 166 both endorse the creation of multidisciplinary teams to assess these patients and refer for treatment appropriately, and I would have liked to see more emphasis on this in the document. One of the main reasons for the apparently equivocal results of treatment is likely to be the difficulty in confirming the cause of pain and ensuring that suitable patients receive treatment promptly, given the haphazard and fragmented nature of current service provision.

Comment provided to Healthcare Improvement Scotland by:

Consultant Interventional Radiologist