

Back pain in osteoporotic vertebral fractures

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SUMMARY: This review article examines the epidemiology and pathogenesis of back pain and vertebral fractures in osteoporosis, reviewing the management of pain in patients with vertebral fractures and the direct and indirect effect of osteoporosis treatments on back pain. **INTRODUCTION:** The management of patients with vertebral fractures has largely concentrated on the prevention of further fractures by the treatment of underlying osteoporosis, with drug treatment for acute and chronic back pain and the non-pharmacological management of vertebral fractures receiving less attention. **DISCUSSION:** Emerging evidence suggests that, in addition to reducing the incidence of vertebral fractures, calcitonin, intravenous bisphosphonates and teriparatide may also have a direct effect on bone pain. Targeted analgesia, tailored to individual need is often required in both the acute and chronic phases following vertebral fracture. Vertebroplasty and kyphoplasty have also been approved for use in the management of vertebral fractures and may prove useful in selected patients unresponsive to conventional pain relief. There is some evidence to support the use of individualised tailored exercise programmes aimed at strengthening back muscles to maintain bone density and reduce further fracture incidence. In addition the use of specific orthoses may help to reduce kyphosis, improve mobility and reduce pain.

CONCLUSION: Chronic back pain associated with vertebral fracture provides a great challenge to health care professionals and the patient. This demands a combination of options, including not only therapeutic interventions, but also physiotherapy, psychological support and patient education.

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