Vertroplasty for Spinal Fracture

Abstract:

Sir,

We read with interest the recent editorial by Culleton and Torreggiani. Mechanical correction or augmentation of vertebral fractures appears attractive intuitively. A number of devices have been approved for this purpose and spinal augmentation is widespread particularly in North America.

Recent well powered randomized controlled trials have cast doubt on the use of vertebroplasty in patients with persistent back pain following vertebral collapse. Kallmes et al found no significant difference between those who underwent vertebroplasty or a sham procedure in terms of improvement in fracture associated pain or pain-related disability. Buchbinder et al found no short- or long-term benefit from vertebroplasty over sham procedure in respect of physical function, quality of life or perceived improvement. In a further multicentre randomized trial vertebroplasty undertaken in patients with acute fractures (oedema on MRI imaging) would appear to be of benefit; however the lack of a sham procedure in the control group in this study may reduce the power of this study. Thus it would appear that vertebroplasty may be indicated in the treatment of acute fracture but not in chronic intractable pain setting.

The experience with spinal augmentation procedures has proven to be a salutary lesson in the need for well structured and randomized trials to be undertaken before technology is widely adopted and advocated as the new standard of care. Medical devices are not subjected to the same rigors as pharmaceutical agents prior to their approval; however reimbursement agencies are increasingly seeking higher grade evidence to support their use in routine care. The importance in identifying patients with vertebral fractures, who have increased morbidity and mortality, serves to draw attention to the need for proven therapies to be employed in this expanding group of patients. A renewed focus should be placed on preventing further fractures using effective therapies that have been subjected to the rigors of randomized controlled trials.

M O’Sullivan, J Ryan
Department of Rheumatology, Cork University Hospital, Wilton, Cork
Email: mjaneos@gmail.com

References