

Clinical and scientific letters

Letters not directly related to articles published in *Clinical Medicine* and presenting unpublished original data should be submitted for publication in this section. Clinical and scientific letters should not exceed 500 words and may include one table and up to five references.

Bone protection in chronic obstructive pulmonary disease (COPD) patients requiring regular intermittent glucocorticoid therapy.

Patients with chronic obstructive pulmonary disease (COPD) are at an increased risk of osteoporosis.¹ The aetiology for the bone loss is diverse and includes the use of glucocorticoids which are frequently prescribed in short intermittent courses.² A yearly cumulative dose of 800–900 mg of prednisolone is thought to be equivalent to more than three months of cumulative treatment.³ Guidelines recommend bone protection in patients aged over 65 years

who are exposed to glucocorticoids for over three months.⁴

A retrospective case note analysis over a 12 month period at an urban GP practice was carried out to establish the prescribing of bone protection in COPD patients over the age of 65 years who were treated with intermittent courses of prednisolone. Inflammatory conditions were an exclusion criteria.

112 patients over the age of 65 years were identified as having had intermittent steroid therapy. The number of courses of prednisolone ranged from 1–15 (mean = 2.8 courses). The number of days of prescribed prednisolone ranged from 3–365 (mean = 26 days). The cumulative dose of prednisolone prescribed in a year ranged from 90–6150 mg (mean = 569.5 mg). Of the 112 patients investigated, 24 patients took over 800 mg of prednisolone. Only six were treated with a bone protective agent and four were on a calcium and vitamin D supplement.

Our audit shows that consideration of bone protection in COPD patients with frequent exacerbations is overlooked. This could be due to lack of awareness of the cumulative effects of oral steroids on bone mineral density. Hospital practitioners need to consider commencing, or recommend commencing, bone protection in patients presenting with frequent exacerbations

of COPD. Better guidance and awareness on the subject is required.

References

- 1 Langhammer A, Forsmo S, Syversen U. Long-term therapy in COPD: any evidence of adverse effect on bone? *Int J Chron Obstruct Pulmon Dis* 2009;4:365–80.
- 2 Dam TT, Harrison S, Fink HA *et al*. Bone mineral density and fractures in older men with chronic obstructive pulmonary disease or asthma. *Osteoporos Int* 2010;21:1341–9.
- 3 Vestergaard P, Rejnmark L, Mosekilde L. Fracture risk associated with different types of oral corticosteroids and effect of termination of corticosteroids on the risk of fractures. *Calcif Tissue Int* 2008;82:249–57.
- 4 Bone and Tooth Society. National Osteoporosis Society, Royal College of Physicians. *Glucocorticoid-induced osteoporosis: guidelines for prevention and treatment*. London : RCP, 2002.

KAVITHA NADESALINGAM
*Rheumatology registrar*¹

DAVID KIRBY
*Clinical assistant*²

¹Bradford Teaching Hospitals NHS Foundation Trust and Rheumatology Department, St Lukes Hospital, Bradford, UK;
²St James' University Hospital, Leeds Teaching Hospitals NHS Trust