

# Osteoporosis prevention on steroids

The various (many) guidelines were not designed with kidney disease in mind. Locally we have not used bisphosphonates very often in this group, tending to favour vitamin D preparations that are already in use. Two specific concerns are:

- Unknown effects of bisphosphonates on bone already suffering from renal osteodystrophy
- Calcium loading in patients with ESRD

For patients with normal or mildly impaired kidney function, the Lothian Joint Formulary Committee recommendation for patients receiving  $\geq 7.5$ mg prednisolone or equivalent is:

- Patients over 65 - alendronate 70mg weekly, plus Adcal-D3 1 BD
- Patients Under 65 - Treat if DXA t score  $>1.5$  (osteopenia or osteoporosis). Adcal D3 alone if not. Etidronate is an alternative to alendronate.

Risk factors for osteoporosis, or demonstration of osteoporosis will influence decisions. Note that bone density measurements are of unknown relevance in patients with renal failure, in whom osteodystrophy may confound interpretation.

## COMMENCE PROPHYLAXIS WHEN STEROID TREATMENT IS INITIATED

### **Risk Factors**

Menopause  $<45$  years  
Personal or family history of low-trauma fractures  
Amenorrhoea  
Slender build (BMI  $< 20$ kg/m<sup>2</sup>)  
Immobility

## **Alternative Treatments**

- When administering pulse methylpredisolone, an alternative: iv. Pamidronate 30mg iv once only - may repeat in 6 weeks.
- HRT in post-menopausal. Oestradiol or testosterone if these are low.

(Bone density monitoring recommended if so - but this may be misleading in CRF)

- Alfacalcidol or calcitriol 0.25 mcg/d, 3-7 days weekly if bisphosphonates are not tolerated, or if their unproven safety is of concern (eg in younger patients). Should also receive supplemental calcium. Adcal D3 or Calcichew D3 should be used for those with normal renal function (GFR >50mls/min).

## **More information**

Lothian Joint Formulary Guidance

**Acknowledgements:** Neil Turner was the main author for this page. The last modified date is shown in the footer.