



Guidance for stopping alendronate

Dear Editor,

A patient recently asked me "How long should I stay on alendronate?" A very good question that had me struggling. A local rheumatologist has stopped alendronate in several of my patients after five years. "A practical guide to stopping medicines in older people" (BPJ 27, Apr 2010) mentioned alendronate as a medication that could be considered for possible cessation in the elderly, but gave no clear guide on who and when. My limited reading suggests that a holiday from alendronate should be considered after five years in most and ten years in the rest, as alendronate has an ongoing effect after its cessation, the maximal bone strength is attained at three years and additional risk of atypical fracture occur after that duration. I am unsure what to do here? This is an expensive medication and its unnecessary use would be good to eliminate. Wonder if you can answer my questions? What is the optimal duration of alendronate treatment, in whom should we stop it and what monitoring is required?

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Treatment with a bisphosphonate, such as alendronate, has proven benefits in terms of the prevention of bone loss and the reduction of fractures in males or post-menopausal females with osteoporosis. However, alendronate is associated with adverse effects such as oesophagitis, oesophageal ulcers and strictures, as well as a very small increased risk of osteonecrosis of the jaw and atypical femur fractures.¹ Therefore the benefits vs. risks of alendronate treatment must be carefully weighed up and regular review should take place.

There is currently a lack of evidence to form a consensus on the optimal length of alendronate treatment and when, if ever, it should be stopped, and for how long. Many clinicians recommend that alendronate should be interrupted periodically. In theory, this is to allow recovery of bone turnover, which is suppressed during treatment, but it is unknown whether this suppression contributes to the rare adverse effects associated with alendronate.¹ The beneficial effect of alendronate remains for three to five years after ceasing treatment.

In a patient who has taken alendronate for five years and whose bone density is no longer in the osteoporotic range, discontinuing alendronate is a reasonable approach. The patient is likely to have substantial residual anti-resorptive activity during this period. N.B. this can be checked through the measurement of serum P1NP, with a value $< 35 \mu\text{g/L}$ indicative of significant inhibition of bone resorption, however, this test is not usually carried out in general practice. Bone density and fracture risk can be re-evaluated (using DEXA scan) after two years off treatment, and alendronate resumed in patients with a 10-year hip fracture risk greater than 3% (calculated using FRAX).

If patients are still at high risk after five years of alendronate treatment (bone mineral density remains low, fragility fracture has occurred), the risk of stopping treatment is likely to exceed the risk of continuing.¹

In a recent perspective article in the New England Journal of Medicine, the authors concluded the following, based on the limited evidence about long-term alendronate use:²

- Patients with bone density T-scores of -2.5 or below at the femoral neck, after three to five years of treatment, benefit the most from continuation
- Patients with bone density T-scores between -2.5 to -2.0 and an existing vertebral fracture, after three to five years of treatment, may also benefit from continuation
- Patients with bone density T-scores above -2.0 at the femoral neck, after three to five years of treatment, are unlikely to benefit from continuation

The authors also note that reduced doses may be considered if alendronate is continued beyond five years.²

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We value your feedback. Write to us at:
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References

1. Khosla S, Bilezikian J, Dempster D, et al. Benefits and risks of bisphosphonate therapy for osteoporosis. *J Clin Endocrinol Metab* 2012;97:2272-82.
2. Black D, Bauer D, Schwartz A, et al. Continuing bisphosphonate treatment for osteoporosis – for whom and for how long? *N Engl J Med* 2012;366(22):2051-3.

Pneumovax 23 repeat doses: correction

In the article “The management of community-acquired pneumonia” BPJ 45 (Aug, 2012), it was stated that: adults aged over 65 years and those at increased risk of complications from pneumonia should receive the vaccine Pneumovax 23... Doses should be repeated every three to five years for people at increased risk. Healthy people aged over 65 years generally only require a single dose.

People at high risk should receive a second dose three to five years after their first dose, not every three to five years.

Antibiotic treatment for syphilis: correction

In the article “Syphilis: testing for the great imitator” Best Tests (June 2012), it was stated that Penicillin G (benzylpenicillin sodium) was the first-line treatment for all stages of syphilis. **Benzathine benzylpenicillin** is in fact the preferred treatment at all stages, as it is longer-acting. Treatment is usually initiated by a sexual health or infectious diseases physician.