Monitoring bone density in older women is unnecessary and potentially misleading

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Monitoring bone mineral density in postmenopausal women taking osteoporosis drugs (bisphosphonates) is unnecessary and potentially misleading, concludes a study published on BMJ.com today.

Osteoporosis is a major public health problem, particularly in older women because bone density falls after the menopause as oestrogen levels dwindle. Low bone mineral density is an important risk factor for fractures.

Some guidelines recommend regular monitoring of bone mineral density in postmenopausal women, but it is costly and some experts question whether it is able to show how a patient is responding to treatment.

So researchers based in Australia and the USA assessed the need for monitoring by estimating how much the effects of the drug alendronate (a widely used bisphosphonate) differ between individuals.

They analysed data from the Fracture Intervention Trial (FIT), a large randomised trial that compared the effects of alendronate with placebo in over 6,000 postmenopausal women with low bone mineral density. Bone density of the hip and spine was measured at the start of the study and then again one, two and three years later.

After three years of therapy, almost all (97.5%) women treated with alendronate showed at least a modest increase in hip bone mineral density. Moreover, this treatment effect did not vary substantially

between individuals. This, say the authors, makes monitoring individuals' response to treatment unnecessary.

Another reason often given for monitoring is to improve adherence to treatment. However, most problems occur within three months of starting treatment - much earlier than the first measurement at one year, explain the authors. Evidence also shows that discussing problems with a healthcare professional a few months after starting treatment improves adherence.

Monitoring bone mineral density in postmenopausal women in the first three years after
starting treatment with a bisphosphonate is unnecessary and, because of the potential to mislead, is best avoided, they conclude.

These findings strengthen the case against routine monitoring of bone mineral density during the first few years of treatment, writes Juliet Compston, Professor of Bone Medicine at the University of Cambridge, in an accompanying editorial. The clear implication for clinical practice is that patients may be given inappropriate advice if changes in bone mineral density are used to monitor treatment.

She concludes: "Routine monitoring of bone mineral density during the first few years of antiresorptive treatment cannot be justified because it may mislead patients, lead to inappropriate management decisions, and waste scarce healthcare resources."

Source: British Medical Journal (news : web)

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