



Osteoporosis Canada

Ostéoporose Canada

Atypical fractures and bisphosphonates: Osteoporosis Canada response

We are aware of recent press reports concerning the possibility that long-term use of alendronate for osteoporosis and the occurrence of unusual fractures reported mostly in the thigh bone¹.

We recognize that you might find these reports concerning. Osteoporosis Canada takes your concerns seriously and we will continue to be vigilant in order to inform you about the latest research. The study cited in the newspaper articles has been reviewed by experts from the Scientific Advisory Committee at Osteoporosis Canada and their response is below

It is a fact - all medications have risks associated with them. Osteoporosis medications are no exception. Every time a physician recommends and prescribes a medication, it includes carefully weighing the risks and benefits of taking a medication.

The study referenced above reported that the authors identified 15 women with atypical fractures of the thigh, called subtrochanteric fractures, who had been treated with alendronate. They noted that bisphosphonate use was observed in 37% of all patients presenting with this type of fracture and that in their group of patients these fractures represent only 6% of all hip fractures. The authors state that their report provides further evidence of a potential link between alendronate use and low energy fractures of the thigh bone. They do go on to state that further studies are required to establish whether a clear association exists.

This letter to the editor has some limitations, **which were discussed by the authors**, and which should lead us to interpret the findings with caution. Three major limitations are the small number of women identified with these atypical fractures on prior alendronate therapy, the unknown number of patients who sustained these types of fracture who never received alendronate therapy, and the fact that this was not a prospective randomized controlled trial - as such it is not possible to state that alendronate cause atypical fractures.

To date, thigh fracture has not been reported with other commonly used osteoporosis medications including related bisphosphonates such as risedronate and etidronate. Other studies, evidence and data support that the notion that **thigh fracture associated with bisphosphonate use is extremely rare**.

Fractures (broken bones) due to osteoporosis, on the other hand, are extremely common. Osteoporotic fractures are linked to additional fractures, altered quality of life, worsening of other health conditions and in some cases – death. Bisphosphonate medications provide protection from osteoporotic fractures. It is important to remember that **your physician carefully weighs the risks and benefits of taking a medication for your unique**

situation every time he or she recommends and prescribes a medication. Your healthcare team is available to review any concerns or questions you may have about this issue.

1. Lenart BA, Lorch DG, Lane J. Atypical fractures of the femoral diaphysis in postmenopausal women taking alendronate. *N Engl J Med.* 2008 358;1304-1306