



Osteoporosis Canada

Ostéoporose Canada

Osteonecrosis of bone: Our team of experts weighs in

Last week, Osteoporosis Canada heard a news story that suggested that there is an increased risk of developing osteonecrosis of bone if you are taking a bisphosphonate medication for osteoporosis. This was based on a research study published in the Journal of Rheumatology. This news item caused some concern for many osteoporosis patients who take these medications.

Osteoporosis Canada put its team of experts to work to review this study. Six of our top medical advisors contributed to this effort:

- Dr. Rick Adachi, Rheumatologist, McMaster University
- Dr. Robert Josse, Endocrinologist, University of Toronto
- Dr. Aliya Khan, MD, FRCPC, FACP, FACE, McMaster University
- Dr. Heather McDonald-Blumer, Rheumatologist, University of Toronto
- Dr. Suzanne Morin, Internal Medicine, McGill University
- Dr. Bill Leslie, Internal Medicine and Radiology, University of Manitoba
- Dr. Alexandra Papaioannou, Geriatrician, McMaster University

Here is a summary of what they found.

What is osteonecrosis of bone?

Osteonecrosis is a condition of bone where the blood supply to a small portion of the bone is disrupted. Without sufficient blood supply, that portion of the bone may break down. Typically this occurs close to a joint such as the hip, knee, shoulder or ankle. Osteonecrosis usually leads to pain and eventually to arthritis of the affected joint.

What is a bisphosphonate?

Bisphosphonates are a class of drugs used to treat osteoporosis. These drugs are very effective at preventing fractures (broken bones) in patients with osteoporosis.

Bisphosphonates used in the treatment of osteoporosis in Canada include: alendronate (Fosamax®), etidronate (Didrocal®), risedronate (Actonel®) and zoledronic acid (Aclasta®).

What did the study show?

The study was trying to see if bisphosphonates can cause osteonecrosis of bone. The authors of the study did conclude that there was an increased risk of osteonecrosis of bone in patients who take bisphosphonates. However, according to our team of medical experts, there were a number of weaknesses in the way the study was designed that severely limit what anybody can conclude from the results. Because of the poor design of the study and a significant lack of information, it is not

clear which bones of the body are affected and which patients would be at high risk of developing this condition or whether there is any connection at all. January 25, 2008

Our experts conclude that we need more research in order to see if there is any sort of connection between osteoporosis or the medications we use to treat it and osteonecrosis of bone. What remains clear is that the risk of fracture in those with osteoporosis is high and that bisphosphonates can decrease this risk very significantly.

What does this mean to you?

Osteoporosis is a disease of bone that leads to increased risk of broken bones (fractures). The bones most likely to break are the bones in the spine, hip and wrist. Fractures caused by osteoporosis can have very serious consequences including pain, disfigurement, loss of independence and even death. It is very important that, if you have osteoporosis, you decrease the risk of having a fracture.

If you have osteoporosis and are on treatment with one of the bisphosphonates, you are getting a huge benefit. **These drugs very significantly decrease your chance of suffering a fracture.**

No drug is without the possibility of side-effects. Osteoporosis drugs are no exception. In the case of bisphosphonates, **the risk of any serious side-effects is extremely rare.**

In the balance, most individuals who have osteoporosis are much better taking an osteoporosis medication. On a bisphosphonate, you are a great deal more likely to prevent a fracture than to ever get a serious side-effect.