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Osteonecrosis

(New study shows that 1 in 25 patients get jaw disintegration)

BISPHOSPHONATES such as Fosamax, Acetenol, Reclast and Boniva are widely used to treat osteoporosis. With short term use they are shown to reduce the incidence of new fractures in patients with established osteoporosis. In women with osteopenia, bisphosphonates are shown to prevent bone loss, and physicians prescribe them with the hope of preventing future fractures. While the short term use of these medications has been shown to be beneficial, there is growing concern regarding the long-term consequences with their use.

1 out of 25 patients taking Fosamax suffered from osteonecrosis of the jaw

Healthy bone has turn-over where old bone is removed (resorption) and new bone is formed to replace the old removed bone. The bisphosphonates significantly suppress resorption, but also significantly suppress new bone formation. Studies show that the use of bisphosphonates are associated with a 60-90% reduction in new bone formation. Thus, the diminished bone loss is beneficial for a few years, but overtime, the lack of new bone results in excessively calcified old bone that is excessively brittle. This old excessively calcified bone looks denser on X-ray and DEXA scan but it is, in reality, very brittle and inflexible. Use of these medications for more than a few years is associated with inability to repair and heal even micro-cracks that occur with normal daily activities and is associated with osteonecrosis (disintegration of the excessively brittle bone). This can occur anywhere but the jaw appears to be particularly susceptible and can result in tooth loss or even jaw disintegration with relatively minor procedures such as tooth extraction. A recent study of over 13,000 patients by researchers at the University of California School of Dentistry and published in the Journal of the American Dental Association found that 1

out of 25 patients taking Fosamax (alendronate) suffered from osteonecrosis of the jaw while no cases were found among patients without a history of Fosamax use. Most cases were discovered after a dental procedure. The osteonecrosis resulted in infection, loss of teeth and exposed non-healing bone (1). Merck & Co, the makers of Fosamax, have previously stated that this serious side-effect was rare and confined to patients using intravenous forms, and this is what most doctors tell their patients. Dr. Sedghizadeh DDS, the lead researcher of this study states, "We've been told that the risk with oral bisphosphonates is negligible, but it is not negligible." It is now recommended that dentists screen patients for bisphosphonate use and many will not perform any significant dental procedures on patients who have taken bisphosphonates.

The brittle bones caused by bisphosphonates use is not limited to the jaw. There are numerous reports of patients suffering atypical large bone fractures with little or no trauma, including bilateral femur fractures, which are not seen in patients without a history of bisphosphonate use (2-5). Bone brittleness and fracture risk increases with increasing duration of bisphosphonate use even if bone density continually improves (6).

Heart Arrhythmia and Muscle Pain

There are a number of studies that demonstrate that the use of bisphosphonates is associated with an increased risk of heart arrhythmias (7-10). This includes a large study of 1700 women published in Archives of Internal Medicine that demonstrated that current and past users of bisphosphonate medication such as Fosamax, Actenol, Reclast and Boniva had significant increased risk of potentially fatal heart arrhythmias. It was shown that any individual who had ever used these meds (even if stopped years prior) had a 300% increased risk of abnormal heart arrhythmia and a 575% increased risk of sustained arrhythmia. In addition, the risk was higher if the medications were used by those who also had diabetes mellitus or were currently taking statin medication for high cholesterol. There are also increasing reports of muscle and joint pain due to bisphosphonate use.

Use of most popular osteoporosis medications are associated with brittle bones, osteonecrosis, heart damage and cancer.

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Esophageal Cancer

In a letter in the New England Journal of Medicine, U.S. Food and Drug Administration official Diane Wysowski said that they are receiving increasing numbers of reports of esophageal cancer associated with the use of Fosamax. There is typically two years between the start of the drug treatment and the development of cancer (11).

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