Osteoporosis: Biphosphonate or Nutrition?

New Information!
Consider...
(1) Femur Fracture & Osteonecrosis of Jaw from Osteoclast Inhibitors
and
(2) 70% Decrease of Fracture using Vitamin D3 over Placebo
then
(3) Nutritional Help

(1)
Osteoporosis Drugs - BIPHOSPHATES (Boniva, Fosamax, Actonel, Reclast) - Linked to Unprovoked Fracture of FEMUR and OSTEONECROSIS of Jaw

Biphosphonates act on osteoclasts to prevent bone breakdown and reabsorption. This causes disturbed osteoblast and osteoclast balance, and the bone becomes brittle and susceptible to fracture. *

* Source: *Fort Wayne News Sentinel,* April 26, 2010, page 1F Link

Other article links about BIPHOSPHONATES and potential links:

- **esophagus cancer link** -http://www.journalgazette.net/apps/pbcs.dll/article?AID=/20090103/NEWS10/901030318
- **jaw damage link** - http://www.journalgazette.net/apps/pbcs.dll/article?AID=/20081108/FEAT/811080318
- "**weird fracture just below hip**" - http://www.webmd.com/osteoporosis/news/20100324/only-rare-fractures-linked-to-osteoporosis-drugs

BIPHOSPHONATES Suppress Bone Turnover for up to 6 months...

Even after stopping biphosphonate use, ***bone turnover remains suppressed for up to 6 months*** with blunting of the bone mineral density response to strontium renelate during this time. After 6 months, bone mineral density increases in the spine but not at the hip or heel. *

* Source: Middleton ET, Steel SA, Aye M, Doherty SM: The effect of prior biphosphonate therapy on the subsequent BMD and bone turnover response to strontium renelate. J of Bone and Mineral Research 2010; 25(3):455-462

(2)
VITAMIN D-3 SUPPLEMENTATION SHOWED A 70% PROBABILITY OF BEING A BETTER TREATMENT THAN PLACEBO FOR THE PREVENTION OF NON-VERTEBRAL FRACTURES, HIP FRACTURES, AND NON-VERTEBRAL, NON-HIP FRACTURES

The efficacy of vitamin D-3 in preventing fractures and falls has been explored in a number of clinical trials. However, recent evidence revealed new questions about the adequate doses of vitamin D-3 supplementation and its efficacy in fracture prevention independent of calcium supplements for various types of fractures.

A meta-analysis to estimate the effectiveness of 800 IU daily vitamin D-3 supplementation for increasing bone mineral density (BMD) and preventing fractures in postmenopausal women was done on Medline and EMBASE for controlled trials comparing the effectiveness of cholecalciferol (vitamin D-3) against placebo with or without background calcium supplementation in the treatment of postmenopausal women.

Eight controlled trials evaluating the effect of vitamin D-3 supplementation with or without calcium were assessed. Of 12 658 women included in a Bayesian meta-analysis, 6089 received vitamin D-3 (with or without calcium) and 6569 received placebo (with or without calcium). Compared to placebo, vitamin D3 with calcium supplementation showed beneficial effects on the incidence of non-vertebral (odds ratio [OR] 0.77, 95% credibility limit [CL] 0.6-0.93) and hip (OR 0.70, 95% CL 0.53-0.90) fractures, while the effects on non-vertebral-non-hip fractures (OR 0.84, 95% CL 0.67-1.04) % point increase) were associated with more uncertainty. Vitamin D-3 supplementation showed a 70% probability of being a better treatment than placebo for the prevention of non-vertebral fractures, hip fractures, and non-vertebral, non-hip fractures. Compared to calcium supplementation, vitamin D-3 plus calcium reduced non-vertebral fractures (OR 0.68, 95% CL 0.43-1.01) and non-vertebral, non-hip fractures (OR 0.64, 95% CL 0.38-0.99), but did not reduce hip fractures (OR 1.03, 95% CL 0.39-2.25). Key limitations to this analysis include a small number of studies and heterogeneity in the study populations.

This meta-analysis supports the use of vitamin D3 of 800 IU daily to reduce the incidence of osteoporotic non-vertebral, hip, and non-vertebral-non-hip fractures in elderly women.

Vitamin D-3 with calcium appears to achieve benefits above those attained with calcium supplementation alone for non-vertebral and non-vertebral-non-hip fractures.

* Source: Efficacy of vitamin D-3 supplementation in preventing fractures in elderly women: A meta-analysis. Bergman, GJD; Fan, T; McFetridge, JT; Sen, SS. CURRENT MEDICAL RESEARCH AND OPINION 26 (5). MAY 2010. p.1193-1201

(3)

A NUTRITIONAL APPROACH

A nutritional approach to osteoporosis prevention may well be preferred. That approach can include these recommendations to support bone health and to treat osteoporosis:

1. Take calcium. [Consider **Formula #2** by Cox® Technic Resource Center Inc which is calcium citrate (as opposed to calcium carbonate sold in drugstores) with hydrochloric acid for absorption, magnesium, manganese, vitamin D3 and an additional 5 000 units of vitamin D3 a day. For more information on Formula #2 www.coxtrc.com/supplements/formula2calcium.html.]
2. Increase Vitamin D3 intake to 5000 units a day
3. Exercise regularly with walking and free weights
4. Minimize caffeine and alcohol intake

www.coxtrc.com 1-800-441-5571