

Time for balance? Preventing atypical femoral fractures related to bisphosphonates

March 4 2015

Physicians worldwide frequently prescribe bisphosphonates such as alendronate (Fosamax) and ibandronate (Boniva) to treat osteoporosis and prevent fragility fractures. Unfortunately, long-term bisphosphonate use has been linked to an increased risk of atypical femoral fractures. In the March 3, 2015 edition of *JBJS Reviews*, [Blood et al.](#) offer some guidance on how to prevent such fractures.

The authors note that prodromal thigh pain and a radiolucent line on X-rays of patients with a history of chronic bisphosphonate use are strong indicators of an impending fracture. Among bisphosphonate users who have an incomplete fracture with little or no pain, the authors recommend a trial of bisphosphonate discontinuation, protected weight-bearing, calcium and vitamin-D supplementation, and possible teriparatide (Forteo) therapy. They add that prophylactic fixation should be considered if there is no radiographic or symptomatic improvement after two to three months of that conservative approach. Blood et al. further recommend that patients at high risk for atypical femoral fracture should consider discontinuing bisphosphonate therapy after five years of continuous use. They also encourage orthopaedists to assess the contralateral femur for signs of impending fracture in patients who have already had an atypical femoral fracture.

JBJS Reviews Editor, Thomas A. Einhorn, MD, points out "It is important to note that while the majority of these [fractures](#) are most likely associated with bisphosphonate use, recent findings show they may also occur in patients on other anti-resorptive drugs such as

denosumab (Prolia) and a very small number of [patients](#) have developed these bone changes and fractures with no history of drug use."

The recommendations by Blood et al. notwithstanding, the absolute risk of atypical femoral fractures is low (3.2 to 50 cases per 100,000 person-years among short-term bisphosphonate users and about 100 cases per 100,000 person-years among long-term users). Consequently, for most people with osteoporosis, the proven fragility-fracture risk-reduction benefits of [bisphosphonates](#) outweigh the risks of atypical femoral fracture, as discussed by JBJS Editor-in-Chief Marc Swiontkowski, MD, in the January 28, 2015 "[Case Connections](#)" article published in *JBJS Case Connector*.

Provided by Journal of Bone and Joint Surgery

Citation: Time for balance? Preventing atypical femoral fractures related to bisphosphonates (2015, March 4) retrieved 8 May 2024 from <https://medicalxpress.com/news/2015-03-atypical-femoral-fractures-bisphosphonates.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.