

Atypical Fracture of femur on bisphosphonate therapy- A Primary Care Guide

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Fracture Reduction in South Central Policy Group (FriSCy 2011)

Why do I need to read this?

There has been a recent MHRA alert regarding atypical femoral fractures in patients on bisphosphonates (Volume 4, Issue 11, June 2011).

It is very unlikely to affect many patients in your practice.

Bisphosphonates are very effective in reducing the risk of future fracture lowering the risk of hip fracture by 50% and other fractures by 30%.

However, we have recently become aware that these drugs may rarely lead to unusual type of hip fracture called an atypical subtrochanteric fracture. The risk of these rare fractures is only 5 fractures for every 10,000 years (0.05%) of taking the drug. For every 137 hip fractures these drugs stop from happening they may cause an extra atypical fractures, so the benefits are much greater than the potential risks.

Similar fractures have now been seen in denosumab patients and in patients without exposure to these drugs.

What is the MHRA advice?

- Atypical femoral fractures are often bilateral; therefore the contralateral femur should be examined in bisphosphonate-treated patients who have sustained a femoral shaft fracture
- *Discontinuation of bisphosphonate therapy in patients suspected to have an atypical femur fracture should be considered while they are evaluated, and should be based on an assessment of the benefits and risks of treatment for the individual*
- During bisphosphonate treatment, patients should be advised to report any thigh, hip, or groin pain. Any patient who presents with such symptoms should be evaluated for an incomplete femur fracture
- The optimum duration of bisphosphonate treatment for osteoporosis has not been established. The need for continued treatment should be re-evaluated periodically based on the benefits and potential risks of bisphosphonate therapy for individual patients, particularly after 5 or more years of use

What is the response from Secondary Care in South Central?

1. We have created pathways for patients presenting with atypical fractures for their surgical and medical treatment (attached)
2. We have not produced guidance for all patients so it is important to remain alert to new thigh pain in patients on bisphosphonates for more than a year.

What do I need to do now?

If you see a patient with a possible atypical fracture these are the salient features:

1. Taking any type of bisphosphonate for at least a year and active treatment within the last 12 months.
2. The pain is felt typically in the anterior thigh or groin and is dull or aching in nature.

3. Other causes to exclude are osteoarthritis from the spine, hip or knee.
4. If there is a suspicion of an atypical fracture consider stopping the bisphosphonate and request an urgent xray with the following details:
 - a. Indication: Thigh pain on bisphosphonate ?atypical fracture
 - b. View: AP + lateral of whole femur
5. If radiograph reports an insufficiency fracture or localized periosteal reaction consider urgent referral to your local trauma clinic/ osteoporosis service and make the patient non-weight bearing with a crutch on opposite side to the painful thigh.