



Comment on the Case Report 'Multiple Fractures Associated With Alendronate Use' by Bodur et al.

"Alendronat Kullanımına Eşlik Eden Multipl Kırıklar" Başlıklı Olgu Sunumu Hakkında Görüşler

To the Editor;

I recently read the interesting case report entitled 'Multiple Fractures Associated with Alendronate Use' published in your journal. There are some important points that should be mentioned for this case report (1).

During evaluation of this case, X-ray, magnetic resonance imaging, whole body bone scintigraphy and Positron Emission Tomography (PET) were done. According to the literature, there is no algorithm for evaluating insufficiency fractures. How did authors make the decision for ordering imaging modalities? In addition, why was PET done? Was it necessary?

One of the most important topics on X-ray imaging of insufficiency fractures is fracture pattern. In this case, no X-ray finding was determined, however, although there is no proven casual relationship, insufficiency fractures due to alendronate use are characterized by transverse fracture pattern, unicortical thickening and hypertrophied diaphyseal cortices (2,3). In their recent study, Neviasser et al. (2) found similar X-ray findings in 20 of 25 insufficiency fracture patients. This should be emphasized for early diagnosis of insufficiency fractures.

Another topic that should be asserted is teriparatide therapy. Teriparatide therapy for longer than 2 years is generally not advised because animal studies showed increased risk for secondary osteosarcoma after teriparatide therapy in rats (4,5).

Additionally, according to the report, teriparatide therapy was started after pubic ramus fractures, 3 months later than the first fracture.

Between February 2009 and April 2009, did patient get and medical treatment or physical therapy? When she was allowed full weight bearing? Did the right pubic ramus fracture happened in April related to minor trauma?

In my opinion, these little deficiencies did not decrease the value of this interesting case report.

Conflict of Interest:

Author reported no conflicts of interest.

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Dear Colleague,

Thank you for your interest in our case report.

As we have stated in the article, Magnetic Resonance Imaging (MRI) was performed due to the persistence of left femur pain despite normal X-ray and ultrasonography. A number of analyses were done, in order to find out the cause of this pathologic fracture detected in MRI. Primary or metastatic bone and soft tissue tumors were excluded via scintigraphy and PET CT. As a result, no organic pathology was determined.

Although the first fracture was not seen on X-ray, the latter ones were observed radiographically; and the fracture areas were typical and not related with trauma.

As you have stated; animal studies show that; the prolonged and high dose teriparatide treatment increase the incidence of osteogenic sarcoma. There is no evidence about PTH having a carcinogenic action in the dose and treatment duration approved in humans. The treatment with teriparatide is approved by 18-24 months by FDA. Like in many European countries, in Turkey, this duration is limited to 18 months. We have used the drug for 12 months (1-3).

Throughout the process, the patient undoubtedly had received physical therapy. After intramedullary nail fixation; the patient could ambulate by partial weight bearing with a walker. However, due to new fractures on pubic ramus, full weight bearing was delayed for approximately 6 months.

Regards.

Hatice Bodur, MD

References

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