

## R: Avascular Necrosis of the Femoral Head in a Patient With Behçet's Disease

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Dear Editor,

I read the paper titled “Avascular Necrosis of the Femoral Head in a Patient with Behçet's Disease” by Ersöz et al.,<sup>1</sup> nicely carried out to focus attention to the association of osteonecrosis of femoral head in a Behçet's Disease (BD) patient, in April 2013 issue of Turkish Journal of Rheumatology. This possible relationship of BD with bone marrow infarction is interesting; however, a direct causal relationship is yet to be fully understood.<sup>2</sup> The etiology of osteonecrosis is believed to be multi-factorial and associated with genetic predilection, metabolic factors, local factors affecting blood supply, such as vascular damage, and possibly with some unique features pertaining to the cellular milieu.<sup>3,4</sup>

Glucocorticoid usage is a well-known factor in the development of osteonecrosis of bone. Although patients on long-term therapy are at the highest risk, osteonecrosis has also been reported to occur with short-term exposure to high doses and even with topical ointment usage.<sup>5</sup> The presented case of a 66-year-old woman has been reported to receive prednol (methylprednisolone) regularly in exacerbations

of the disease, at least for three years. In their two case reports of BD with osteonecrosis, one patient was on corticosteroid treatment, while the other developed extensive bone marrow infarction of the knee without the use of corticosteroids.<sup>2</sup> In this same report, the possible relationship between the presence of anticardiolipin antibodies and the occurrence of osteonecrosis has been touched as well.

In our practice of hip or knee magnetic resonance examinations, it is uncommon to come across osteonecrosis in BD patients evaluated for either joint disease symptoms or extremity pain. The propensity for involvement of the musculoskeletal system (i.e. myonecrosis/myositis) in BD patients and even the presence of osteonecrosis may have other factors in role. Possible factors such as, but not all, anticardiolipin, anti- $\beta$ 2-glycoprotein I antibody, tissue factors and other genetic relationships in the occurrence of osteonecrosis in BD patients should be thoroughly investigated.

### REFERENCES

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### **Author's Reply**

We would like to thank Sanal<sup>1</sup> for her interest to our paper "Avascular Necrosis of the Femoral Head in a Patient with Behçet's Disease"<sup>2</sup> and for her nice contributions to the topic. We share the opinion that the possible relationship of Behçet's Disease with bone marrow infarction and osteonecrosis has yet to be fully understood.<sup>3</sup> We also agree the need for investigation of the possible effects of anticardiolipin, anti- $\beta$ 2-glycoprotein I antibody, tissue factors and other genetic relationships in the occurrence of osteonecrosis in patients with Behçet's Disease.<sup>3,4</sup> However, the development of avascular necrosis of the femoral head after corticosteroid administration to treat several complications of Behçet's Disease is a clinical reality.<sup>2,3</sup> We believe that since this type of therapy may play a role in the development of avascular necrosis of the femoral head, it should be conducted judiciously in this patient group. Further studies, which investigate and compare the incidence of avascular necrosis in Behçet's Disease patients who were administered corticosteroid and those who were not, would increase our knowledge on this topic. Although the occurrence of osteonecrosis seems rare in patients with Behçet's Disease as Sanal<sup>1</sup> stated in her letter, we believe that in patients

with Behçet's Disease who suffer from hip pain, avascular necrosis of the femoral head should be kept in mind along with arthritis and involvement of the musculoskeletal system (i.e. myonecrosis/myositis), especially in patients who have previously received steroid therapy.

### **REFERENCES**

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