

## **HYPERTROPHIC OSTEOARTHROPATHY AFTER KIDNEY TRANSPLANTATION TREATED WITH PAMIDRONATE**

Sein Yin See, Jennifer Fillaus, Erik Ericson, Brian Stevens, Vinaya Rao, Clifford Miles

University of Nebraska Medical Center, Omaha, NE.

Hypertrophic osteoarthropathy (HOA) was initially described in association with chronic lung conditions by Bamberger and Marie. HOA is most commonly seen as a paraneoplastic syndrome in patients with lung cancer, and in various autoimmune and infectious diseases. Here we present a case of HOA after renal transplantation successfully treated with pamidronate.

Case: A 22 year-old Caucasian male with congenital renal dysplasia received a living-related kidney transplant in April 2008. There was no prior history of HOA, cancer, or rheumatic disease. Pulmonary histoplasmosis had been diagnosed during the pre-transplant evaluation and treated with voriconazole. He received induction with basiliximab and was maintained on a steroid-free protocol. Initial graft function was good. Several weeks after transplant, the patient developed diffuse arthralgias and myalgias. He was initially treated with corticosteroids for presumed serum sickness. The symptoms initially improved, but returned when the steroids were tapered. Serologic profile for autoimmune arthritides was unremarkable. Bone scintigraphy showed multiple foci of discrete, moderately intense activity throughout the skeleton. Biopsy of the right tibia demonstrated subperiosteal new bone formation. A diagnosis of HOA was made based on the combination of clinical, radiologic and histologic information. Pamidronate, 60mg intravenously, was administered due to refractory pain. The patient reported reduction of pain by 60% and regained full range of motion in his joints by 2 weeks post treatment. Transient neutropenia was observed, but otherwise pamidronate was well-tolerated.

Conclusion: HOA is a clinical syndrome characterized by proliferation of skin and bone in the distal extremities. Recently, there have been reports in the literature of refractory pain in HOA treated with bisphosphonates. To our knowledge, this is the first report of HOA after renal transplantation treated with pamidronate.