

Context: 40-year-old female with anti-phospholipid syndrome intractable to warfarin with cerebrovascular accidents including spinal cord infarction complicated by abdominal bleeds and multiple intramuscular hematomas admitted to acute inpatient rehabilitation after fall for subdural hematoma while on apixaban with concurrent diagnosis of ventilator-dependent COVID-19 status post extubation presented with intractable pain and decreased range of motion in bilateral hips.

Findings: Active heterotopic ossification (HO) in bilateral hips on triple phase bone scan. Tried Indomethacin 25mg TID, but developed right lower limb intramuscular hematoma. Warfarin was not pursued for co-treatment of HO and anti-phospholipid syndrome as patient had previous treatment failures for anti-phospholipid syndrome and would have put her again at risk for breakthrough reinfarction.

# Alternative bisphosphonates for the treatment of bilateral hip joint heterotopic ossification with bleeding risk

Andrew Tsitsilianos, M.D., Carolin Dohle, M.D., Andrew Abdou, D.O.



Conclusion: Treated with Alendronate 70mg once weekly. Etidronate, the mainstay treatment for HO, no longer available in the US, as is Clodronate. Pain improved substantially, and patient resumed rehabilitation.

Clinical Relevance: Alendronate may serve as a potential bisphosphonate for the treatment of HO. In this complicated case of bilateral hip HO in the setting of bleeding and clotting risks, where NSAIDs and warfarin were contraindicated, the recourse was to use an alternative bisphosphonate, Alendronate, to diminish further bony matrix remodeling.

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Evidence-based references:

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