

Tumoral Calcinosis in a Patient with Sarcoidosis

A 27-year-old Caucasian female with sarcoidosis and chronic kidney disease was admitted in January of 2017 with hypotension, constipation, and painful swelling over both of her hips. Her initial serum chemical analysis was notable for calcium 13.7 mg/dl, creatinine 3.04 mg/dl, albumin 3.3 gm/dl, phosphorus 4.2, CRP 13 mg/L, ESR 73 mm/hr, serum ACE 66 U/L, 1,25-dihydroxy vitamin D 43.1 pg/ml, and PTH 12 pg/ml. A skeletal survey revealed large multi-loculated periarticular collections of milk of calcium in her bilateral hips. The patient had been originally treated with prednisone following her diagnosis of sarcoidosis in May 2016 but self-terminated this regimen after unwanted weight gain from steroid use. She also endorsed copious milk intake, consuming a gallon of milk a day.

The pathophysiology of hypercalcemia in sarcoidosis arises from the extra-renal production of 1,25-dihydroxy-Vitamin D3 (calcitriol) by alveolar macrophages expressing 1 α -hydroxylase, which metabolizes 25-hydroxy-vitamin D3 into calcitriol [1]. Calcitriol in turn facilitates intestinal absorption of calcium, leading to hypercalcemia and its associated side effects. Interestingly, hypercalcemia occurs in approximately only 10% with sarcoidosis and the percentage with clinically significant hypercalcemia is even lower [2].



Radiographic appearance of the left hip in a patient with tumoral calcinosis secondary to untreated sarcoidosis. There are multiple loculated collections of milk of calcium with peripheral mineralization within the gluteal region and thigh.



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The patient's hypercalcemia corrected with aggressive fluid hydration and intravenous furosemide. Her prednisone was resumed while she was inpatient, and she was also started on hydroxychloroquine. At the time of discharge, her calcium had corrected to 10.9 mg/dl, and her tumoral calcinosis had markedly diminished.

References

1. Iannuzzi MC, Rybicki BA, Teirstein AS (2007) Sarcoidosis. *N Engl J Med* 357: 2153-2165.
2. Rizzato G (1998) Clinical impact of bone and calcium metabolism changes in sarcoidosis. *Thorax* 53: 425-429.