

## $\square$ PICTURES IN CLINICAL MEDICINE $\square$

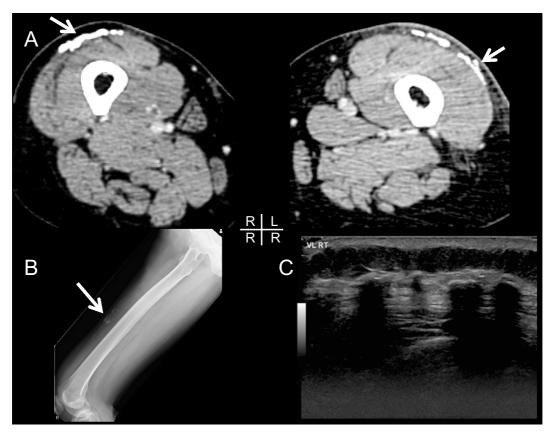
## Severe Subcutaneous Calcification in an Interferon-β-treated MS Patient

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Key words: calcification, multiple sclerosis, interferon-β, ultrasound

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Picture.

We previously reported a 53-year-old patient with multiple sclerosis showing acrocyanosis (1). She had multiple sclerosis at 34 years of age and began interferon- $\beta$  (IFNB)-1b treatment at 42 years. She felt pain at the injection site at 52 years of age. Two months later, she frequently observed bending of the 30-gauge needle used for IFNB-1b injection. At 53 years of age, IFNB-1b treatment was switched to IFNB-1a because of injection site pain. Two months later, she developed acrocyanosis. Computed tomography revealed

multiple subcutaneous high-density lesions at the previous injection sites in both thighs (Picture A). X-rays and an ultrasound analysis showed multiple subcutaneous calcifications (Picture B and C). The serum intact parathyroid hormone, calcium, phosphate, and interleukin-6 levels were normal upon discontinuing IFNB-1a. The serum antinuclear antibodies were increased by 160-fold. Lobular panniculitis was reported at the subcutaneous IFNB injection site (2). However, the precise calcification mechanism at the injec-

tion site has not been determined.

The authors state that they have no Conflict of Interest (COI).

## References

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