Bilateral Foot Acrocyanosis in an Interferon-β-treated MS Patient

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A 53-year-old woman with a 20-year history of relapsing-remitting multiple sclerosis had been receiving interferon-β-1b therapy for 11 years and at 53 years of age was switched to interferon-β-1a therapy because of injection site pain. She developed bilateral edema and pain in her legs after two months of starting the new medication. Examination revealed pitting edema with bluish discoloration and coldness in both legs (Picture), leading to a diagnosis of acrocyanosis (1), and also showed a positive finding for antinuclear antibody (1/160). The patient had also been taking oral estradiol-norethisterone acetate for menopausal syndrome for 6 months prior to the development of acrocyanosis. Contrast-enhanced computed tomography revealed subcutaneous edema but no deep venous thrombosis. After interferon-β-1a and estradiol-norethisterone acetate were discontinued, acrocyanosis disappeared. Whereas acrocyanosis induced by vasospasm due to interferon-α has been previously described (2), we could find no existing reports on Interferon-β-mediated acrocyanosis. This case suggests that Interferon-β, estradiol-norethisterone acetate, or their combined administration may thus potentially cause secondary acrocyanosis.

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References