



DERMATOLOGICAL SURGERY

## CRYOLIPOLYSIS-INDUCED MORPHEA

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**Background:** Cryolipolysis is a non-invasive contouring technique; the application of cold temperature trigger adipocyte apoptosis. Cryolipolysis has minimal side effects such as transient erythema, temporary numbness, and bruising. Rare side effects include late-onset pain, skin necrosis, motor neuropathy and frost bite. We report the first case of morphea post-cryolipolysis.

**Observation:** A healthy 67 year-old-female developed multiple painful, firm, thickened sclerotic plaques on her lower abdomen and bilateral anterior thigh six months after undergoing CoolSculpt cryolipolysis treatment in these areas. Biopsies from the left thigh and right abdomen demonstrated the following: orthokeratosis overlying an atrophic dermis; full-thickness dermal collagen sclerosis; and, perivascular and interstitial infiltrates, predominantly lymphocytic with scattered plasma cells. These histopathology findings were consistent with the clinical impression of morphea.

The patient trialed dermaroller therapy to affected areas based on the following schedule: calcipotriol BID during the week and halobetasol propionate 0.05% ointment BID on weekends. She simultaneously underwent ultraviolet light therapy three times weekly, which was discontinued after one month due to phototoxicity. The patient's lesions spread to her bilateral labia majora, causing severe ongoing pain and allodynia. She was treated with a tapered course of prednisone, methotrexate and folic acid supplementation. Her topical regimen was amended as follows: tacrolimus 0.1% ointment BID during the week and halobetasol propioniae 0.05% ointment BID on the weekends. She had significant improvement: her lesions have resolved with hypopigmentation, and she is now pain-free.

**Key Message:** This case highlights morphea as a rare but possible side effect of cryolipolysis.

