CASE REPORT

Sclerotherapy-induced purpura annularis telangiectodes of Majocchi—like eruption

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Key words: pigmented purpuric dermatosis; purpura annularis telangiectodes of Majocchi; sclerotherapy.

INTRODUCTION

Purpura annularis telangiectodes of Majocchi (PATM) is a pigmented purpuric dermatosis (PPD) characterized by bluish-red annular patches with telangiectasia. Lesions often occur in young female patients and most often symmetrically involve the bilateral lower extremities. Here, we report a case of a PATM-like eruption presenting in a woman in her 60s after sclerotherapy for venous varicosities.

CASE REPORT

A 63-year-old white woman presented with a 1-month history of asymptomatic red-brown rings on her lower extremities (Fig 1). Six weeks before the development of lesions, she had been treated for venous reflux disease with sodium tetradecyl sulfate injections (2 sessions 2 weeks apart). The rings appeared 3 days after the injections, and she reported that they all developed at prior injection sites. Before presentation, she had been unsuccessfully treated with a course of clotrimazole/betamethasone dipropionate cream for initial concern of tinea. Examination showed numerous nonblanching annular to arcuate patches composed of confluent petechia with few telangiectasias involving the bilateral lower extremities. A punch biopsy was obtained, and the clinical differential diagnosis included PPD, postsclerotherapy hyperpigmentation, porokeratosis, granuloma annulare, and vasculitis. Histologic examination showed red blood cell extravasation with a perivascular lymphocytic infiltrate (Fig 2).

DISCUSSION

PATM is an uncommon form of PPD, and to our knowledge, there have been no prior reports of PPD occurring after sclerotherapy.

The etiology of the various types of PPD is unknown and likely multifactorial, with potential inciting agents/associated conditions including drugs, vascular fragility, hypertension, diabetes mellitus, and infections. PPDs have been reported to occur after administration of medications including nonsteroidal anti-inflammatory drugs (NSAIDs), antibiotics, vitamins/supplements, analgesics, sedatives, chemotherapeutics, antihyperglycemics, antihypertensives, and isotretinoin. Although our patient was taking ibuprofen as needed in addition to a daily multivitamin, the temporal relationship and distribution of lesions at the sites of injection implicate sclerotherapy as the more likely cause of her eruption. Vascular irritation from the detergent used in the injections is a potential cause of this eruption. A possible additive role of previous topical therapy and use of an NSAID in the development of the eruption cannot be excluded.

Postsclerotherapy hyperpigmentation affects 10% to 30% of individuals after treatment and is thought to arise from direct endothelial damage with resultant red blood cell extravasation and hemosiderin deposition. Although postsclerotherapy hyperpigmentation was considered in this instance, the annular appearance and lack of hyperpigmentation after treatment make it less likely. Additionally, the...
presence of lymphocytic inflammation histologically
would support a pigmented purpuric eruption as
opposed to postsclerotherapy hyperpigmentation,
which typically shows hemosiderosis without
inflammation.

After receipt of the biopsy results, the patient was
offered reassurance. Subsequent clinical evaluation
showed gradual fading of lesions over the course of
months, with minimal residual pigmentation. The
patient has been offered pulsed dyed laser treat-
ment for residual pigmentation but has currently
defered.

We report a case of an annular purpuric eruption
showing clinical and histologic features of PATM
developing after sclerotherapy for venous disease
of the legs. Development of lesions directly at the
site of previous injection supports injection-related
trauma as the likely cause. Exacerbation of the
reaction by NSAID and vitamin ingestion and
topical antifungal/corticosteroid therapy cannot be
excluded. We believe that recognition of this entity
may prevent unnecessary treatment/workup for
potential clinical mimickers, including infection
and vasculitis.

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REFERENCES

1. Sardana K, Sarkar R, Sehgal VN. Pigmented purpuric dermatoses: an overview. Int J Dermatol. 2004;43:482-488.
2. Kaplan R, Meehan SA, Leger M. A case of isotretinoin-induced purpura annularis telangiectodes of Majocchi and review of
substance-induced pigmented purpuric dermatosis. JAMA Dermatol. 2014;150(2):182-184.
3. Goldman MP, Kaplan RP, Duffy DM. Postsclerotherapy hyperpigmentation: a histologic evaluation. J Dermatol Surg Oncol.
1987;13:547-550.