Case 19

A 51-year-old woman from Bangkok

Chief complaint: Asymptomatic lesions on arm for several years.

Present illness: The patient noticed a few painless, non-pruritic lesions on her left arm and forearm several (> 10) years ago. They have not increased in number since their first appearance. She had never had any previous skin abnormalities at the site of the lesions.

Past history: She was diagnosed with left breast cancer 9 years ago and underwent conservative breast surgery, radiotherapy, chemotherapy, and hormonal therapy. She has been treatment-free for 2 years. She also has diabetes mellitus, dyslipidemia, and non-alcoholic fatty liver disease.

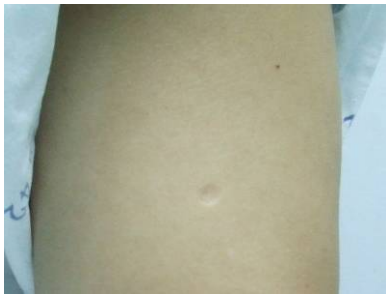
Family history: None of her family members has similar lesions.

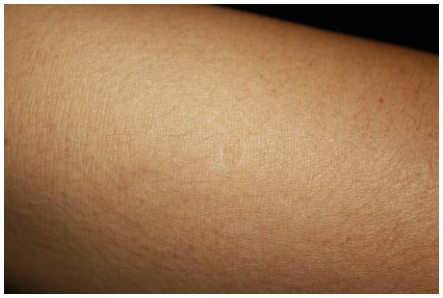
Skin examination: Two solitary, non-tender, skin-colored, flaccid, depressed macules on left upper extremity (one on arm and one on forearm).

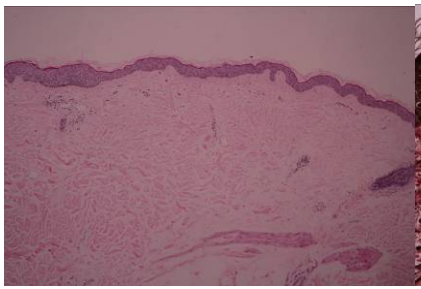
Investigation: Negative anti-nuclear antibody.

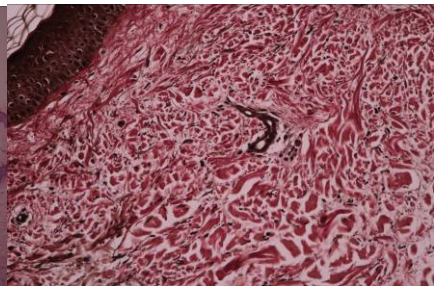
Histopathology (S10-012850A)

Thin and short collagen bundles in loosely arrangement , with sparse elastic tissue, within the upper dermis









Diagnosis: Primary anetoderma.

Treatment: Assurance.

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Discussion:

Anetoderma is a rare elastolytic disorder characterized by localized slackness of the skin. It can be divided into primary and secondary forms. In primary anetoderma, the lesions occur within clinically normal skin, whereas secondary anetoderma arises in the site of a pre-existing dermatosis.[1] The etiology of anetoderma is still unknown, but deficiency of dermal elastin[2], immunologic[3, 4] and enzymatic[5, 6] destruction of elastin, and abnormalities of protective system[6, 7] have been suggested.

The skin lesions typically appear in young adults, mainly women, as asymptomatic, round or oval, circumscribed areas of flaccid skin forming either depression or sac-like protrusion of the surface, resembling lesions of cutis laxa. The number varies widely from a few to hundreds. They may be pink, skin-colored, hypopigmented, or blue-white and usually measure 5 to 30 mm in diameter but can coalesce to form larger herniations. On examination, they yield on pressure, allowing the finger to pass through the surrounding ring of normal skin – the buttonhole sign. They are often found on the trunk, neck, and proximal part of extremities. The depressed lesions should be differentiated from mid-dermal elastolysis, atrophic scars, atrophodermas, and

extragenital lichen sclerosus. The differential diagnosis of the elevated lesions includes papular elastorrhexis, nevus lipomatosus, connective tissue nevi, and hypertrophic scars.[1]

Focal loss of dermal elastic fibers is the key histopathological change in anetoderma. Other common findings are perivascular inflammatory cell infiltration and remains of fine, irregular, or twisted elastic fibers.[8] Dermal collagen may also be reduced.

Anetoderma has been reported in patients with several autoimmune diseases, such as Graves' disease, autoimmune thyroiditis, systemic sclerosis, and systemic lupus erythematosus. Recently, the association between anetoderma and positive antiphospholipid antibodies, with or without prothrombotic state, was established in the literature.[9-12]

Surgical excision of the anetodermic lesions may be helpful in patients with limited disease, as the lesions persist throughout life and do not improve with any other treatment. Appropriate control of the underlying disease may prevent new lesions in secondary anetoderma.[1]

References

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