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New Tender Nodules After Arthroscopy

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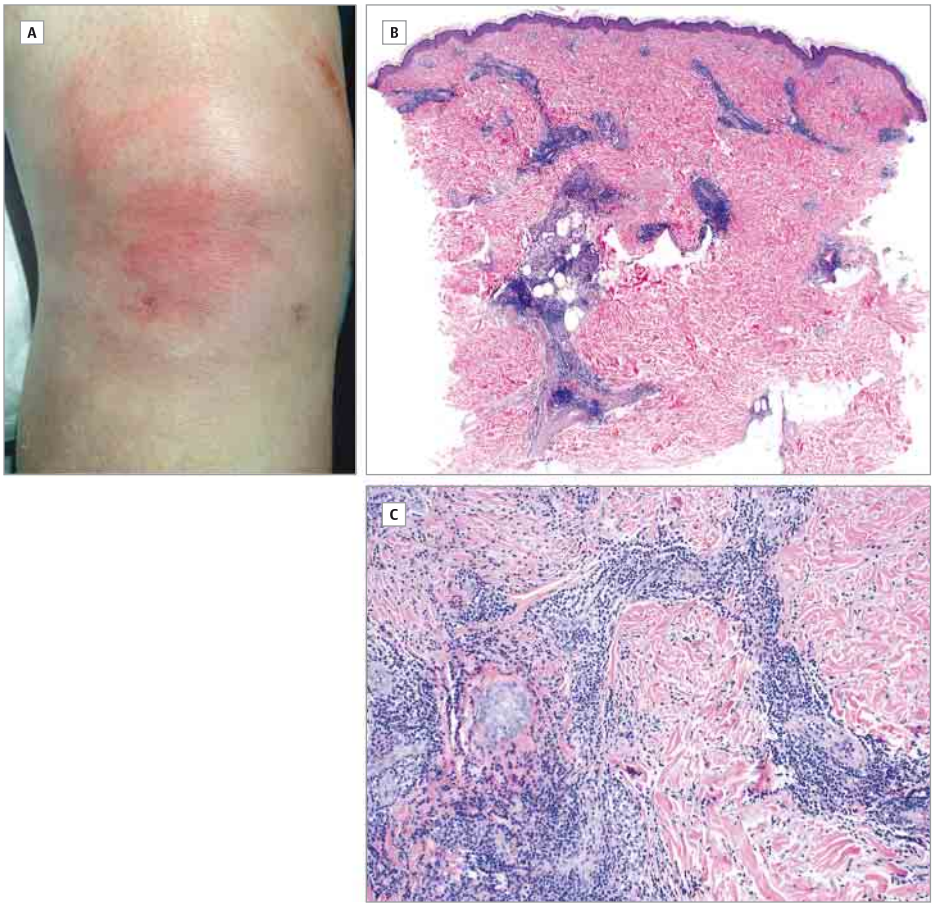

Figure. A, Clinical photograph of right knee demonstrating ill-defined erythematous plaques and nodules adjacent to 2 small incisional scars from previous arthroscopy. B and C, Photomicrographs of punch biopsy specimen. B, Hematoxylin-eosin, original magnification ×4. C, Hematoxylin-eosin, original magnification ×10.

A woman in her 20s with a medical history significant for systemic lupus erythematosus (SLE) presented with tender erythematous nodules after undergoing right knee arthroscopy (**Figure**, A). SLE had been diagnosed ten years previously after she presented with a positive antinuclear antibody titer (most recent titer, 1:1280), arthralgias, leukopenia, oral ulcers, and a malar erythematous eruption. There was no history of discoid or tumid lupus lesions. Initially, the lesions were thought secondary to soft-tissue infection and were treated with courses of clindamycin, vancomycin, and doxycycline. Physical examination revealed poorly demarcated erythematous plaques and nodules, tender to palpation, ranging from the distal thigh to the lower leg, adjacent to arthroscopy sites. Lesions around the suture sites appeared more violaceous. A punch biopsy of the lesion was performed (Figure, B and C).

WHAT IS THE DIAGNOSIS?

A. Cellulitis

B. Tumid lupus erythematosus

C. Gyrate erythema

D. Erythema nodosum

Diagnosis

B. Tumid lupus erythematosus

Microscopic Findings and Clinical Course

The biopsy specimen showed dense, superficial and deep, perivascular and periadnexal lymphocytic infiltrate (Figure, B). Higher-power magnification (Figure, C) demonstrated deep periadnexal lymphocytic infiltrate. The patient had been taking hydroxychloroquine for her well-controlled SLE prior to presentation. The patient was treated with prednisone taper, which improved the lesions, but flares occurred with tapering. Clobetasol ointment improved the redness, but the lesions were still sore and edematous. Quinacrine treatment was subsequently added to the hydroxychloroquine, and worst areas were treated with intralesional kenalog. The patient noted the most significant improvement with the intralesional kenalog, and the lesions improved substantially over the next several months. Of note, the patient developed a deep venous thrombosis in the same extremity and a subsequent pulmonary embolus. Lupus anticoagulant antibody titer was negative, and the patient was treated with rivaroxaban.

Discussion

Tumid lupus erythematosus (TLE) is an uncommon distinct subset of chronic cutaneous lupus erythematosus. First described in 1930, TLE is an infrequent topic in the literature. Characteristic descriptions of TLE include nonscarring erythematous plaques or papules, symmetrically distributed on sun-exposed areas of the face, neck, arms, and back. The histologic differential diagnosis includes polymorphous light eruption, Jessner lymphocytic infiltration of the skin, reticular erythematous mucinosis, and pseudolymphoma. It is rare for TLE lesions to present unilaterally,[1,2] below the waistline,[1,2] and concomitantly with SLE.[1,3] To our knowledge, only 2 other cases of TLE occurring at a site of trauma haven been reported.[4] In both cases, the patients presented with asymptomatic plaques appearing weeks after the trauma, in contrast to our patient who presented with symptomatic lesions within days. In addition, neither of these cases carried a diagnosis of SLE. The Koebner phenomenon with chronic cutaneous lupus at the sites of scratches or scars has been reported in patients with SLE.[5] However, discoid lesions are more often noted, and the scars are generally mature, whereas our patient's scar was new. The Koebner phenomenon frequently correlates to the activity of the associated disease,[5] but the patient's SLE was well-controlled at the time she developed TLE. Topical corticosteroids or sunscreens alone may lead to complete resolution of TLE, and systemic antimalarial agents are effective in treating approximately ninety percent of cases.[1] Systemic corticosteroids or immunosuppressants may be effective in persistent cases.[1]

ARTICLE INFORMATION

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