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Case Reports

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Diltiazem Induced Bullous Leukocytoclastic Vasculitis

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Background

- Leukocytoclastic Vasculitis (LV) is an inflammatory disease characterized by fragmented neutrophilic infiltrate and fibrinoid necrosis of small vessels.
- The incidence of LV is about 30 per 1 million people per year, accounting for more than two-thirds of cutaneous vasculitis cases.

Case Presentation

- 64 year old woman presented with acute onset right leg rash with tense bullae on the dorsum of the foot two days after starting Diltiazem for atrial fibrillation.
- Physical exam showed:
 - diffuse petechiae present on thighs, buttocks, abdomen, and both upper extremities
 - nontender tense bullae which did not rupture on palpation or traction.
 - Desquamation of the superficial dermis on the dorsal aspect of both feet and ankles.
- Labs showed normal basic metabolic panel, complete blood count, liver function tests, ANCA, and urine analysis. C3 and C4 Complement were decreased.
- Punch biopsy of several petechial lesions demonstrated perivascular and dermal neutrophilic infiltrate and their nuclear dust along with fibrinoid necrosis of the small vessels consistent with acute leukocytoclastic vasculitis.
- Diltiazem was discontinued and patient began to improve.

Images



Figure 1 and 2. Diffuse petechiae, tense bullae, and desquamation of superficial dermis present on both lower extremities

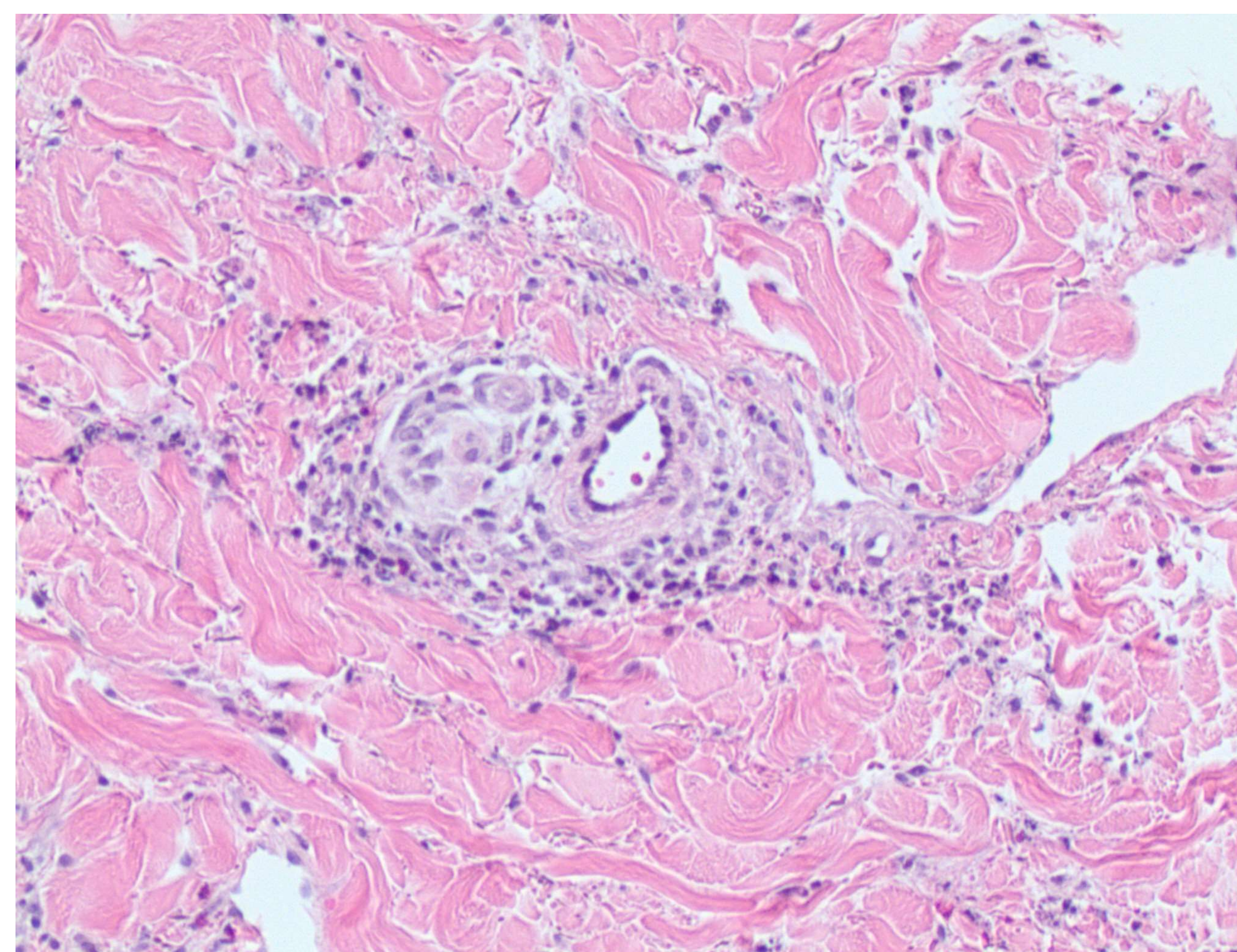


Figure 3. Skin punch biopsy demonstrating perivascular and dermal neutrophilic infiltrate, with fibrinoid necrosis of small vessels consistent with acute leukocytoclastic vasculitis

Discussion

- The most common cutaneous manifestation of LV is symmetric maculopapular purpura of the lower extremities, but may include a variety of presentations ranging from petechiae, urticaria, ulcers, nodules, hemorrhagic bullae, and gangrene of the fingers.
- Etiologies include drug reactions, infections, connective tissue diseases, and other rare causes.
- Nonsteroidal anti-inflammatory agents are the most commonly implicated drugs, while Group A beta-hemolytic streptococci are the most common infectious cause.
- Skin biopsy establishes a definitive diagnosis of LV.
- Diltiazem is a rare cause of LV, documented in few case reports.
- Most cases resolve spontaneously after removal of the inciting agent, however steroids have been used in some cases of severe LV.

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