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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.

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.

References