Hydroxychloroquine-Induced DRESS in a Patient with Dermatomyositis

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Background

- Drug reaction with eosinophilia and systemic symptoms (DRESS)
  - Also known as drug-induced hypersensitivity syndrome (DIHS)
  - Hypersensitivity reaction with cutaneous and internal organ involvement 2-6 weeks following drug initiation

- Hydroxychloroquine (HCQ)
  - Antimalarial agent often used as first-line treatment for cutaneous dermatomyositis (DM)
  - Associated with morbilliform eruptions in DM patients
  - Induced DRESS in one patient with seronegative arthritis

Case

- 61-year-old man with 2 days of facial edema and pruritic, erythematous eruption on trunk and bilateral upper extremities
- 2 weeks prior, HCQ 200 mg BID had been initiated for newly diagnosed DM
- No other new medications
- Review of systems negative
Before HCQ: Gottron's papules and shawl sign
After HCQ: Morbilliform eruption on trunk and bilateral upper extremities
After HCQ: Symmetric facial edema and erythema
Laboratory Data

- **WBC 12.99 K/μL, 6.3% eos, AEC 0.82 K/μL**
  - Normal 4-10, 0-5% eos, AEC 0-0.35

- **Serum Cr 1.13 mg/dL**
  - Baseline 1.04

- **Rest of CMP and urinalysis normal**
Clinical Course

- Constellation of systemic, cutaneous, and hematologic abnormalities 2 weeks following initiation of HCQ led to diagnosis of HCQ-induced DRESS

- HCQ was immediately discontinued

- Prednisone was initiated at 1 mg/kg/day
9 Days Later

- Eruption was confluent, desquamative, and extended to bilateral lower extremities
- Serum eos: 6.3% → 17%, AEC: 0.82 → 2.08 K/μL
- Cr: 1.13 → 1.21 mg/dL
- ALT: Normal → 62 IU/L
Clinical Course

- Patient completed 6-week prednisone taper
- Weekly monitoring with resolution of cutaneous eruption, peripheral eosinophilia, transaminitis, and renal dysfunction
- No clinical or laboratory sequelae at 10-month follow-up
To our knowledge, this case represents the first report of HCQ-induced DRESS in a patient with DM.

Although HCQ generally has a favorable side effect profile, dermatologists should be aware of its potential to cause DRESS.