**Introduction**

Greater than 600 dermatologic lesions reported with COVID-19. Interface dermatitis and vasculopathic features have been reported in isolation with COVID-19 infection but never together.

**Case Presentation**

**Brief History:**

A 59-year-old unvaccinated man with hypertension, diabetes, follicular lymphoma s/p rituximab and bendamustine on maintenance IVIG who was admitted for acute hypoxic respiratory failure in the setting of COVID-19 ARDS.

**Hospital Course**

- Transferred from OSH for worsening hypoxia x 7 days. Intubated prior to transfer.
- Neutropenic fever from aspiration pneumonia (resolved with vancomycin + cefepime).
- Right SVC and cephalic vein thrombus (on therapeutic enoxaparin).
- Scheduled for percutaneous tracheostomy on hospital day #21 (7 from OSH + 14 at current).

**Post-Operative Day #1**

- Hypotensive, started on norepinephrine (s/p 1L IVF)
- Decreased hourly urine output
- Hypoglycemic, refractory to D50 boluses, on D10 drip
- Therapeutic heparin re-started (enoxaparin held x 24 hours prior to tracheostomy)
- Pan-cultured, started on empiric vancomycin + cefepime + hydrocortisone due to concern for septic shock vs adrenal insufficiency
- Arterial line replaced from R radial → R femoral

**Medication Timeline**

Completed prior to tracheostomy:
- 10 days of dexamethasone
- 5 days of remdesivir
- 7 days of cefepime
- 5 days of piperacillin-tazobactam
- 5 days of vancomycin
- 2 days of G-CSF

Current medications:
- Anticoagulation (enoxaparin→heparin)
- Intermittent diuresis with furosemide

**Differential Diagnosis**

- Heparin Induced Thrombocytopenia
- Disseminated Intravascular Coagulation
- Stevens Johnson Syndrome/TEN
- Vancomycin Flushing Syndrome
- Vasculitis
- Retropertitoneal Hematoma (from A line placement)

**Exam**

Purpuric + pink macules and papules coalescing into a diffuse purpuric plaque with a sharp line of demarcation over the back, buttocks, upper thighs. Borders of the plaque are retiform in appearance overlying 1-3 cm bullous and erosions in dependent areas. No lesions in oral or ocular mucosa.

**Skin Biopsy with Dermatology**

Noninflammatory Thrombotic Coagulopathy with pathologic evidence of Stevens Johnson/TEN

**Lab**

<table>
<thead>
<tr>
<th></th>
<th>Day 0 (Trach)</th>
<th>Day 1 (Pre-Rash)</th>
<th>Day 1 (Post-Rash)</th>
<th>Day 2</th>
<th>Day 3</th>
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<tbody>
<tr>
<td>WBC</td>
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<td>14.5</td>
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<tr>
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<td>Fibinogen 678 PT/INR19.3/1.59</td>
<td>PT/INR 15.6/1.22</td>
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<td>3001/712</td>
<td>2091/674</td>
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<td>x</td>
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**Discussion**

- Unique case of thrombotic microangiopathy coupled with pathologic findings of TEN (without oral or ocular lesions) from COVID-19.
- First to our knowledge, that interface dermatitis and vasculopathic features seen together on punch biopsy with no clear medication contributing, likely a manifestation of COVID-19
- Pathophysiology involves complement activation and persistent platelet activation.²
- Sacral retiform purpuric lesions could be ominous sign for severe disease due to persistent viral replication and release of SARS-CoV-2 protein and interleukin-6.³

**References**