Pearls for Challenging Cases in Skin of Color

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We will be discussing off-label use of medications during this lecture.
**Pearls – Atopic Dermatitis**

- The clinical presentation characterizes by pruritus and an eczematous rash. It is crucial to rule out other eczematous conditions, such as allergic contact dermatitis and cutaneous T-cell lymphomas.

- Its prevalence differs by race and ethnicity, and it is more severe among racial/ethnic minority children.

Pearls – Therapeutic strategies for Atopic Dermatitis

- Corticosteroids +/-
- Calcineurin inhibitors +/-
- Crisaborole

- Phototherapy (nb-UVB)

- Systemic therapies

- Oral antihistamines
- Vitamin D
- Gentle skin care
- Anti-microbials
- Bleach baths
Pearls – Leishmaniasis

• Leishmaniasis should be suspected in travelers that present with a nodule or ulcer at the site of a bug bite.

• Parasite DNA amplification using PCR is the preferred diagnostic approach, as PCR is highly sensitive and can provide species-level identification.

• Treatment depends on multiple factors including causative species, extent and location of lesions, host immune status, treatment toxicity, and patient preference.

# Pearls - Leishmaniasis treatment efficacy

<table>
<thead>
<tr>
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<th>Local therapies (for simple cutaneous disease)</th>
<th>Systemic therapies (for complex cutaneous, mucocutaneous, and visceral disease)</th>
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<tbody>
<tr>
<td><em>L. mexicana</em></td>
<td>Thermo: 90-95% Topical paromomycin: 91%</td>
<td>Miltefosine: 33-88%</td>
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<tr>
<td><em>L. braziliensis</em></td>
<td>Thermo: 58-64% Cryo + IL antimony: 70-80% Topical paromomycin: 91%</td>
<td>Pentavalent antimonials: 78% Miltefosine: 33-88% Fluconazole: 0-100% Pentamidine: 35-86% Liposomal Amphotericin B: 85%</td>
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<tr>
<td><em>L. panamensis</em>/</td>
<td>Ther: 58% Topical paromomycin: 79-90%</td>
<td>Pentamidine &gt; 90% Pentavalent antimonials: 55-90% Miltefosine: 60-94%</td>
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<td><em>L. guyanensis</em></td>
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<td><em>L. infantum</em>/</td>
<td>N/A</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; line: Liposomal Amphotericin B: unknown 2&lt;sup&gt;nd&lt;/sup&gt; line: Miltefosine: unknown Alternative: Pentavalent antimonials: unknown</td>
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Pearls – DRESS

• DRESS is a severe hypersensitivity response to a medication that occurs 15-40 days after initial exposure, with a 10% mortality.

• Clinically, common features include fever, rash with follicular accentuation, lymphadenopathy, eosinophilia, and visceral involvement.

• Treatment is supportive and symptomatic, systemic corticosteroids are the most widely accepted and used treatment in the acute setting, however, their effect on the long-term disease course is unknown.

Pearls – Histopathological clues to the diagnosis of DRESS

- Patterns:
  - Interface dermatitis, generalized and/or foci involving cutaneous adnexa
  - Eczematous
  - Erythema multiforme-like
  - Acute generalized exanthematous pustulosis-like

- Infiltrate:
  - Eosinophils and neutrophils
  - Atypical lymphocytes
    - CD8 positive
    - T-cell clones
  - Small vessel vasculitis and deep dermal involvement are significantly associated with DRESS

Pearls – Mycosis Fungoides

• Its prevalence differs by race and ethnicity, it usually presents at a younger age and more advanced stages in Hispanics and African Americans.

• The most common clinical presentation characterizes by pruritus and an eczematous rash. However, one should consider atypical presentations such as Interstitial MF.

• Interstitial MF characterizes by an infiltrate of neoplastic lymphocytes in the superficial and deep dermis. There is not enough data to support more aggressive therapies for interstitial MF.


Pearls – Histopathological clues to the diagnosis of Interstitial MF

• Interstitial MF has a lymphocytic infiltrate that is more apparent in the superficial dermis than in the deep dermis.
• More T cells than histiocytes (CD68)
• Epidermotropism—helpful if present
• Lack of sclerosis of the collagen fibers & lack of clusters of plasma cells allows distinction from morphea
• In IGDR, the presence of “acute” superficial changes in the epidermis and papillary dermis associated with a granulomatous infiltrate and eosinophils are characteristic.