A Clinical Triad: Treating the Weekend Warrior

ACP Virginia Chapter- Annual Meeting and Clinical Update
March 8, 2019

Kimberly S. Salkey, MD
Associate Professor
Department of Dermatology
Bumps, Burns and Bites...
Oh my!

ACP Virginia Chapter- Annual Meeting and Clinical Update
March 8, 2019

Kimberly S. Salkey, MD
Associate Professor
Department of Dermatology
Kimberly S. Salkey, MD
A Clinical Triad: Treating the Weekend Warrior

I do not have any relevant relationships with industry.
Identify this plant
Poison Ivy
Poison Plants: Ivy, Oak and Sumac

• Most common type of allergic contact dermatitis in the US
• Culprit: Urushiol (oleoresin)
• Founds in *all* continental United States

JW Pine (Ed.) Fisher’s contact dermatitis.; Williams & Wilkins, Baltimore (1995), pp 469-472
Poison Ivy Quiz

• Scratching poison ivy blisters will spread the rash • FALSE
• Poison ivy is contagious • FALSE
• Dead poison ivy plants are no longer toxic • FALSE
• Rubbing weeds on the skin can help • FALSE
Urushiol

• Irritant and allergen
• Combines with skin proteins
• Fomite friendly

- Bound resin cannot be spread
- Rash takes 12-72 hours to appear
- Resolves without treatment in 2-3 weeks
Poison Ivy
Poison Ivy
Poison Ivy

**Fig 1.** Case 1. Black spots on ear (A) and chest (B) in a 2-year-old boy exposed to poison ivy.

**Fig 4.** Case 4. Linear, urticaria-like streak surrounding 2 black spots on top of knee of 7-year-old boy who was playing in woods.
Black spot poison ivy: A report of 5 cases and a review of the literature

Julia G. Kurlan, MD, and Anne W. Lucky, MD  Cincinnati, Ohio

• Requires concentrated sap
• Spots peel and skin heals
• Fomites can cause dermatitis indefinitely
Poison Ivy Treatment

- Wash all exposed areas with cold running water ASAP
- Wash clothing in a washing machine with detergent
- Wash contaminated equipment
- Cool showers, hydrocortisone cream
- Severe reaction
Severe Poison Ivy

• Dry it
  – Domeboro soaks

• High potency topical corticosteroids
  – Clobetasol
  – Betamethasone dipropionate

• Systemic steroid
Treatment of Severe Poison Ivy: A Randomized, Controlled Trial of Long Versus Short Course Oral Prednisone

- **Severe poison ivy:**
  - Known exposure AND and one of:
  - >20% BSA
  - Hands, feet, face or genitals
  - Involvement of 2 or more body areas

- **Treatment regimen:**
  - **Short course:**
    - Prednisone 40mg qd x 5 days
  - **Long course:**
    - Prednisone 40mg x 5 days
    - 30mg x 2 days
    - 20mg x 2 days
    - 10mg x 2 days
    - 5mg x 4 days
Treatment of Severe Poison Ivy: A Randomized, Controlled Trial of Long Versus Short Course Oral Prednisone

Table 2. Clinical Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Short course/27</th>
<th>Long course/22</th>
<th>Total/49</th>
<th>P value</th>
<th>Mean difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questionnaire</td>
<td>18</td>
<td>15</td>
<td>33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telephone</td>
<td>9</td>
<td>7</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noncompliance reported</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0.581</td>
<td></td>
</tr>
<tr>
<td>Reported improvement of rash</td>
<td>22</td>
<td>21</td>
<td>43</td>
<td>0.204</td>
<td></td>
</tr>
<tr>
<td>Mean time to improvement</td>
<td>4.42 days (SD 4.13 days)</td>
<td>2.93 days (SD 1.23 days)</td>
<td>0.109</td>
<td>-1.49 days</td>
<td></td>
</tr>
<tr>
<td>Mean time to resolution</td>
<td>14.63 days (SD 8.87 days)</td>
<td>11.7 days (SD 7.39 days)</td>
<td>0.23</td>
<td>-2.93 days</td>
<td></td>
</tr>
<tr>
<td>Rash return?</td>
<td>4</td>
<td>3</td>
<td>7</td>
<td>0.91</td>
<td></td>
</tr>
<tr>
<td>Return in same location?</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Side effects</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0.239</td>
<td></td>
</tr>
<tr>
<td>Use of other medication</td>
<td>15</td>
<td>5</td>
<td>20</td>
<td>0.02</td>
<td></td>
</tr>
</tbody>
</table>
Poison Ivy Prevention

- Recognition and avoidance
- Wear long clothing
- Keep pets away from wooded areas
- Do not burn poison plants
- Barrier skin creams
Poison Ivy Prevention

**Plastic bags are your friends** —
Use plastic or heavy shopping bags to pull plants from the soil, replacing the bags with the pulling of each plant. Plastic bags can also be used to cover arms for additional protection during the removal process.

**Get to the root** —
Any lingering shoots or seedlings can be killed with white vinegar.

**Cover up** —
Keep skin as covered as possible to avoid any potential contact. Wear long-sleeved shirts and pants.

**Rinse, rinse, rinse** —
After removal or exposure to poison ivy, rinse any exposed skin with water immediately (avoid soap or harsh scrubbing), and wash clothes immediately.
But my TV doctor told me I need Vitamin D!!
Sunburn

• Radiation burn

• Risk factors
  – Time and intensity of UV rays

• Other factors
  – Medications, ozone, altitude, skin phototype
Sunburn

• Differential Diagnosis:
  – Autoimmune disease- SLE
  – Infection- staph scalded skin
  – Solar reactions- phytophotodermatitis, photoallergic, phototoxic
Sunburn Management

✓ Dry it
✓ Cool compresses
✓ NSAIDs
✓ Time
x Topical anesthetics
Oral Vitamin D Rapidly Attenuates Inflammation from Sunburn: An Interventional Study
Increased risk of melanoma with increasing number of sunburns during all life-periods, not just childhood
AAD position statement on Vitamin D

“There is no scientifically validated, safe threshold level of UV exposure from the sun or indoor tanning devices that allows for maximal vitamin D synthesis without increasing skin cancer risk”
AAD position statement on Vitamin D

• “adequate amount of vit D should be obtained from a healthy diet... and/or vitamin D supplements”
Photoaging
Sun Protection

• Shade and sun avoidance
• Protective clothing with UPF rating
  – Solumbra, Coolibar, etc
• Sunscreens
Choosing Sunscreen

• Broad spectrum
• Water resistant
• SPF 30 or greater
SPF 100+ sunscreen is more protective against sunburn than SPF 50+ in actual use

- Natural sunlight, split face, double-blind evaluation
- Less sunburn on SPF 100 side
- Higher SPF compensates for typical sunscreen use behavior

SPF 100+ sunscreen is more protective against sunburn than SPF 50+ in actual use.
“Are you allergic to anything? I mean, aside from whatever it was that bit you?”
Mosquitoes

- Multiple factors for attraction
- Saliva induces histamine release
Mosquito Bite Treatment

- Cool compresses
- Anti-histamine
- Topical corticosteroids
- PREVENTION!
HAVE FUN!!
Bug Repellant

- **DEET**
  - Effective against mosquitoes, biting flies, gnats, chiggers, ticks but NOT stinging insects

- **Picaridin**
  - Same efficacy as DEET

- **Citronella**

- **Permethrin**
  - Used in fabrics or applied to clothing
• 32yo boy scout troop leader
• Recently back from a camping trip
• All of the other campers in his cabin developed similar findings

Diagnosis?
Bed Bug bites
Bedbugs

• Nocturnal, blood-sucking, ectoparasites
• Cimex lectularius
• Do not transmit disease
  – Secondary infection
  – Asthma exacerbation
• Bites are painless and may not appear for several days
Victoria's Secret Latest Chain With Bedbug Problem

The bloodthirsty bedbug army continues to maraud through Manhattan's big name clothing chains; having already brought Hollister and Abercrombie & Fitch to their knees, bedbug forces briefly seized a Victoria's Secret store in Lenox Hill Wednesday, as part of a cunning ploy to make women across the city suddenly very squeamish. It's also believed that female bedbugs—who reproduce via traumatic insemination, i.e. getting jabbed in the abdomen by the male's sharp penis—look hot in a thong.

A spokeswoman for the store's parent company tells NY1 that "only a small and isolated area of the Lenox Hill store was affected...[and] the store was treated Wednesday morning and reopened later that day. All the merchandise in the affected section was removed and destroyed." The company is currently testing other stores for bedbugs citywide, but, again, just an isolated incident. Not trying to be alarmist. Unless you bought some underwear there Tuesday and put it on immediately without washing it, thereby infesting your ladyparts with bedbugs, you're probably fine.
Bedbugs
Bedbugs
Bed Bug Treatment

• Remove bugs
  – Barriers to removal
    • Good hiders
    • Fast movers

• Other
  – Diatomaceous earth → dessication
  – Pyrethroids, dichlorvos, malathion
  – Steam/Heat (45°C or greater)
  – Cold
Bed Bug Treatment
What NOT to do:

• **Abandoning** rooms or even a whole facility
  – Adult bugs can live **1 year** without blood meal

• **“Bug bombs”** or total release foggers
  – Only hit exposed surfaces
  – Bugs have a chance to “run for cover”

• **Simply discarding** beds and bedding
A Clinical Triad: Treating the Weekend Warrior

ACP Virginia Chapter- Annual Meeting and Clinical Update
March 8, 2019

Kimberly S. Salkey, MD
Associate Professor
Department of Dermatology