Axillary Allergic Contact Dermatitis to Topical Clindamycin

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Background

- Clindamycin is a relatively rare sensitizer despite widespread and long-term use1.
- We present a case of allergic contact dermatitis (ACD) to topical clindamycin affecting both axillae.

Patch Testing

Patch Tested To:
- 2019 – 2020 North American Contact Dermatitis Group screening series
- Select emulsifiers, preservatives
- Purified clindamycin, 10% pet.
- Clindamycin phosphate 1% lotion, tested “as is”

Relevant Final Reactions:
- +:
  - Purified clindamycin, 10% pet. (Fig. 4)
  - Clindamycin phosphate 1% lotion (Fig. 5)
  - Tixocortol 21-pivalate
  - Various fragrances
- ++:
  - Clindamycin lotion had no fragrance

Previous Cases

Table 1. Previous reports of allergic contact dermatitis to topical clindamycin

<table>
<thead>
<tr>
<th>Study</th>
<th>Country</th>
<th>Body Site</th>
<th>Patch Test Results on Final Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coskey, Arch Dermatol, 1978</td>
<td>United States</td>
<td>Face</td>
<td>++ to clindamycin hydrochloride 1% aq. at 48hr</td>
</tr>
<tr>
<td>Herstoff, Arch Dermatol, 1978</td>
<td>United States</td>
<td>Face</td>
<td>Positive reaction to clindamycin aq. capsular preparation at 72hr</td>
</tr>
<tr>
<td>de Groot, Contact Derm, 1982</td>
<td>The Netherlands</td>
<td>Face</td>
<td>++ to clindamycin lotion (as is) and clindamycin hydrochloride 1% aq. at 96hr</td>
</tr>
<tr>
<td>Conde-Salazar, Contact Derm, 1983</td>
<td>Spain</td>
<td>Generalized</td>
<td>++ to clindamycin hydrochloride 1% aq. and clindamycin phosphate 1% aq. at 96hr</td>
</tr>
<tr>
<td>de Kort, Contact Derm, 1989</td>
<td>The Netherlands</td>
<td>Face</td>
<td>++ to clindamycin solution and clindamycin phosphate 1% aq. at 72hr</td>
</tr>
<tr>
<td>Yokoyama, Contact Derm, 1991</td>
<td>Japan</td>
<td>Face</td>
<td>++ to clindamycin lotion (as is), clindamycin hydrochloride 0.5% aq. and clindamycin phosphate 0.1% aq. on D3</td>
</tr>
<tr>
<td>Vejlsrup, Contact Derm, 1995</td>
<td>Denmark</td>
<td>Axillae, generalized</td>
<td>+ to clindamycin solution and clindamycin phosphate 1% aq. on D3</td>
</tr>
<tr>
<td>Garcia, Contact Derm, 1996</td>
<td>Spain</td>
<td>Face</td>
<td>Positive reaction to clindamycin phosphate 1% pet. on D3</td>
</tr>
<tr>
<td>Romita, Contact Derm, 2017</td>
<td>Italy</td>
<td>Face</td>
<td>++ to clindamycin 1% pet. on D4, repeated open application test positive after 2 applications</td>
</tr>
<tr>
<td>Veraldi, Contact Derm, 2019</td>
<td>Italy</td>
<td>Inguinal folds</td>
<td>Hydrochloride 1% pet., clindamycin phosphate 1% aq. on D4</td>
</tr>
</tbody>
</table>

Pertinent Negative Reactions:
- Aluminum chloride hexahydrate, 2% pet.
- Drysol (20% aluminum chloride hexahydrate, tested semi-open)
- Inactive ingredients in clindamycin phosphate lotion:
  - Cetostearyl alcohol, 20% pet.
  - Stearyl alcohol, 30% pet.
  - Sodium laureyl sarcosinate, 0.5% aq.

Discussion

- Topical clindamycin is most often used for acne vulgaris and bacterial vaginosis
  - Can also be used to treat hidradenitis suppurativa, rosacea, and bromhidrosis2,3
- ACD from topical application of clindamycin is rare
  - First case described in 1978 from an alcohol-based clindamycin hydrochloride 1% solution for facial acne4
  - Only 1 other case located in the axillae5
  - Cases may present atypically
- In cases of worsening dermatitis coinciding with topical clindamycin usage, it is important to consider ACD

References