

Axillary Allergic Contact Dermatitis to Topical Clindamycin

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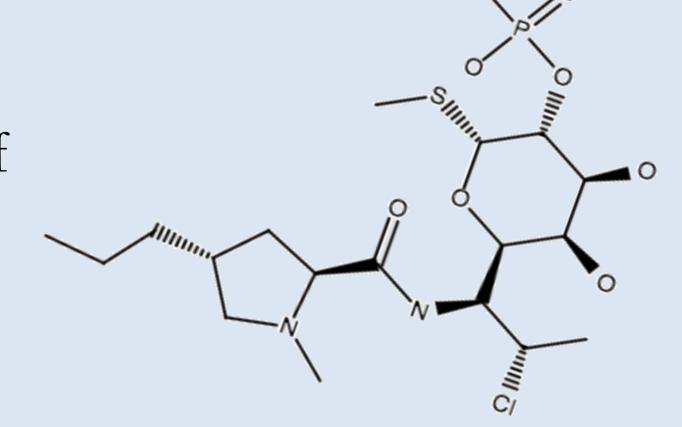
Medical School

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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

Fig. 1. Chemical structure of clindamycin phosphate



Case Presentation

- HPI: A 63-year-old female presented with a 1-year history of intermittent axillary dermatitis
 - Hydrocortisone 1% and 2.5% creams provided minimal improvement
 - Previously prescribed clindamycin phosphate 1% lotion used as deodorant for bromhidrosis
- Fig. 2. Exam: light pink, nummular eczematous plaques in anterior/posterior axillary skin folds



Fig. 3. Fougera brand clindamycin phosphate 1% lotion

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:



Clindamyain

Phosphate Lotion

Clindamyun

- +:
 - o Purified clindamycin, 10% pet. (Fig. 4)
 - o Clindamycin phosphate 1% lotion (Fig. 5)
 - o Tixocortol-21-pivalate
 - Various fragrances
 - (Clindamycin lotion had no fragrance)
- ++:
- o MCI/MI

Fig 5. + reaction to clindamycin phosphate lotion

Previous Cases

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

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

Patch Testing

Pertinent Negative Reactions:

- Aluminum chloride hexahydrate, 2% pet.
- Drysol (20% aluminum chloride hexahydrate, tested semi-open)
- Inactive ingredients in clindamycin phosphate lotion:
 - o Cetostearyl alcohol, 20% pet.
 - o Stearyl alcohol, 30% pet.
 - o Sodium lauroyl 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 bromhidrosis^{2,3}
- ACD from topical application of clindamycin is rare
 - First case described in 1978 from an alcohol-based clindamycin hydrochloride 1% solution for facial acne⁴
 - o 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

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