

# UC Davis

## Dermatology Online Journal

### Title

Unilateral contact dermatitis of the chest

### Permalink

<https://escholarship.org/uc/item/6h61107j>

### Journal

Dermatology Online Journal, 25(10)

### Authors

Ramani, Leena T  
Feldman, Steven R

### Publication Date

2019

### DOI

10.5070/D32510045828

### Copyright Information

Copyright 2019 by the author(s). This work is made available under the terms of a Creative Commons Attribution-NonCommercial-NoDerivatives License, available at <https://creativecommons.org/licenses/by-nc-nd/4.0/>

# Unilateral contact dermatitis of the chest

Leena T Ramani<sup>1</sup> BS, Steven R Feldman<sup>1-4</sup> MD PhD

Affiliations: <sup>1</sup>Department of Dermatology, Center for Dermatology Research, Wake Forest School of Medicine, Winston-Salem, North Carolina, USA, <sup>2</sup>Department of Pathology, Wake Forest School of Medicine, Winston-Salem, North Carolina, USA, <sup>3</sup>Department of Social Sciences & Health Policy, Wake Forest School of Medicine, Winston-Salem, North Carolina, USA, <sup>4</sup>Department of Dermatology, University of Southern Denmark, Odense, Denmark

Corresponding Author: Steven R. Feldman MD, PhD, Department of Dermatology, Wake Forest School of Medicine, Medical Center Boulevard, Winston-Salem, NC 27157-1071, Tel: 336-716-7740, Fax: 336-716-7732, Email: [sfeldman@wakehealth.edu](mailto:sfeldman@wakehealth.edu)

## Abstract

Unusual distributions of contact dermatitis often lead to identification of the offending agent. We present a case of unilateral dermatitis of the chest developing in a patient with a history of allergy to metal. A name tag attached magnetically to his work uniform was identified as the cause of the eruption. Unilateral eruption of the chest can be a manifestation of allergic contact dermatitis to metal objects in breast pockets or attached to clothing.

*Keywords: contact dermatitis, allergic contact dermatitis, unilateral chest dermatitis, metal nametag*

## Introduction

Contact dermatitis is a common cause of isolated rash and the distribution of skin involved usually leads to identification of the source. For instance, poison ivy often affects exposed skin on the hands and legs; nickel and other metals in jewelry will affect areas including the ears, neck, and wrists; cell phones can cause unilateral or bilateral facial dermatitis depending on how one holds the phone [1]. However, the causative agent may not always make direct contact with the skin as shirt and pant pocket contents have caused allergic contact dermatitis [2, 3]. We present a case of unilateral dermatitis of the chest developing in a patient with a history of allergy to metal. A name tag attached magnetically to his work uniform was identified as the cause of the eruption.

## Case Synopsis

A 61-year old man with a history of allergic contact dermatitis to metal was seen in our clinical studies unit to be assessed for participation in a clinical trial for atopic dermatitis. There was a hyperpigmented, pruritic plaque of the left chest (**Figure 1**). The patient's self-reported history of metal allergy was confirmed by a second patch of dermatitis below the umbilicus, adjacent to his belt buckle. He had never been patch tested. The patient worked in a local grocery store and wore a name tag on his left chest. This name tag was fastened to his uniform with a metal magnetic bar on the inside of his shirt, which came into direct contact with his skin (**Figure 2**). He was clinically diagnosed with allergic contact



**Figure 1.** Hyperpigmented plaque of dermatitis on patient's left chest

dermatitis and advised to avoid direct contact with the metal allergens in his name tag.

## Case Discussion

Nickel is the most common contact allergen and the risk of nickel allergy increases with prolonged exposure to the nickel-containing object, which was consistent with our patient who wears his name tag at work for extended periods of time [1, 4]. We have seen cases of allergic contact dermatitis on the left chest caused by various objects kept in left breast shirt pockets. Metal pens and cigarette lighters may be causative. Case reports dating back to 1918 have described localized “match-box dermatitis” to sesquisulfide on matchboxes kept in shirt and trouser pockets [2, 5]. Plastic banknotes have even been implicated in cases of allergic contact dermatitis on the left nipple and left thigh, coinciding anatomically with the patients’ pockets [3].

## Conclusion

Peculiar dermatitis distribution, along with history concerning occupations and hobbies, may provide clues to the cause of allergic contact dermatitis.

## Potential conflicts of interest

Dr. Steven R. Feldman is a speaker for Janssen and Taro. He is a consultant and speaker for Galderma,



**Figure 2.** Metal magnetic bar fastening patient's name tag to his uniform

Stiefel/GlaxoSmithKline, Abbott Labs, Leo Pharma Inc. Dr. Feldman has received grants from Galderma, Janssen, Amgen, Stiefel/GlaxoSmithKline, Celgene and Anacor. He is a consultant for Amgen, Baxter, Caremark, Gerson Lehrman Group, Guidepoint Global, Hanall Pharmaceutical Co Ltd, Kikaku, Lilly, Merck & Co Inc., Merz Pharmaceuticals, Mylan, Novartis Pharmaceuticals, Pfizer Inc, Qurient, Suncare Research and Xenoport. He is on an advisory board for Pfizer Inc. Dr. Feldman is the founder and holds stock in Causa Research and holds stock and is majority owner in Medical Quality Enhancement Corporation. He receives Royalties from UpToDate and Xlibris. Leena T. Ramani has no conflicts to disclose.

## References

1. Rajpara A, Feldman SR. Cell phone allergic contact dermatitis: case report and review. *Dermatol Online J.* 2010;16:9. [PMID: 20579464].
2. Foerster OH. Match and match-box dermatitis. *JAMA.* 1923;81:1186-90. [DOI: 10.1001/jama.1923.02650140030011].
3. Mohamed M, Delaney TA, Horton JJ. Allergic contact dermatitis to plastic banknotes. *The Australasian J of dermatol.* 1999;40:164-6. [PMID: 10439531].
4. Thyssen JP, Linneberg A, Menne T, Johansen JD. The epidemiology of contact allergy in the general population--prevalence and main findings. *Contact dermatitis.* 2007;57:287-99. [PMID: 17937743].
5. Weber LF. External causes of dermatitis: a list of irritants. *JAMA Dermatol.* 1937;35:129-79. [DOI: 10.1001/archderm.1937.01470190132013].