

Urticarial vasculitis: A Complication of SMZ-TMP therapy

Arveen K. Bhasin¹  | Jason C. Sluzevich²

¹Department of Pulmonary, Allergy and Sleep, Mayo Clinic Florida, Jacksonville, FL, USA

²Department of Dermatology, Mayo Clinic Florida, Jacksonville, FL, USA

Abstract

Recognize that delayed hypersensitivity reactions to sulfonamides may present as urticated plaques with hyperpigmentation and purpura for which a diagnosis of urticarial vasculitis should be considered.

KEYWORDS

drug exposure, hives, hyperpigmentation, leukocytoclastic, Urticaria, vasculitis

1 | INTRODUCTION

A 62-year-old man presented with painful generalized urticarial eruption with fixed purpuric patches involving the bilateral lower extremities. Two weeks prior received two short courses of trimethoprim–sulfamethoxazole. Examination revealed smooth evanescent pink plaques and irregular hyperpigmented patches (Figure 1A) admixed with variable annular and retiform purpuric patches (Figure 1B).¹ No mucositis was present. Punch biopsy showed interstitial and perivascular neutrophilic inflammation with leukocytoclasia and fibroid necrosis. A diagnosis of urticarial vasculitis was made. The delayed onset is characteristic of immune complex small vessel vasculitis which begins 7 to 10 days after drug exposure

when sufficient quantities of antibody develop to produce complement-fixing antigen–antibody complexes.² This results in dermal neutrophilic infiltrates which may mimic allergic urticaria clinically and resolve with postinflammatory hyperpigmentation along with purpura which may be patterned with extensive cutaneous vascular involvement. Oral prednisone 20 mg for two weeks cleared the inflammatory component with the purpura subsequently fading over the next 6 months.

ETHICS STATEMENT

Written informed consent for publication of photographs was obtained from the patient and available upon request. This case report did not receive any funding. Authors have access to all source data for this case report.

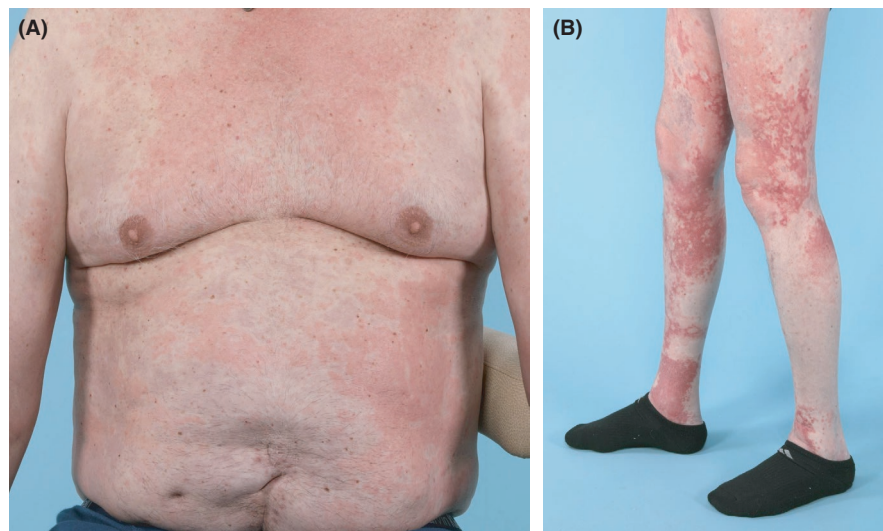


FIGURE 1 A. Smooth evanescent pink plaques and irregular hyperpigmented patches on the torso. B. Variable annular and retiform purpuric patches involving bilateral lower extremities

ACKNOWLEDGMENTS

Published with written consent of the patient.

CONFLICT OF INTEREST

None declared.

AUTHOR CONTRIBUTIONS

AKB: wrote the initial draft, participated in collecting patient data (clinical history), reviewed the literature, interpreted the clinical findings, critically revised the manuscript for important intellectual content, and approved the final version. JCS: wrote the initial draft, participated in collecting patient data (pictures and clinical history), reviewed the literature, interpreted the clinical findings, critically revised the manuscript for important intellectual content, and approved the final version.

DATA AVAILABILITY STATEMENT

Authors have access to all source data for this case report.

ORCID

Arveen K. Bhasin  <https://orcid.org/0000-0003-1879-4059>

REFERENCES

1. Solensky R, Khan D, et al. Drug Allergy: An Updated Practice Parameter. *Ann Allergy Asthma Immunol.* 2010;105:1-78.
2. Suh KS, Park JB, Lee KH, et al. Evolution of urticarial vasculitis: A clinical, dermoscopic, and histopathologic study. *J Am Acad Derm.* 2014;70(5):179.

How to cite this article: Bhasin AK, Sluzevich JC. Urticarial vasculitis: A Complication of SMZ-TMP therapy. *Clin Case Rep.* 2021;9:e03872. <https://doi.org/10.1002/ccr3.3872>