

Camela Elisa (Orcid ID: 0000-0001-7201-9163)
Megna Matteo (Orcid ID: 0000-0003-1803-2046)
Potestio Luca (Orcid ID: 0000-0001-5940-0592)
Fabbrocini Gabriella (Orcid ID: 0000-0002-0064-1874)

Article type: Correspondence

Title: Reply to “A case of symmetrical drug-related intertriginous and flexural exanthema-like eruption associated with Pfizer COVID-19 vaccination” by Manaa et al.

Authors: Elisa Camela¹, Massimiliano Scalvenzi¹, Matteo Megna¹, Luca Potestio¹, Gianluca Guerrasio¹, Luigi Fornaro¹, Gabriella Fabbrocini¹, Claudia Costa¹

Departments and institutions: ¹Section of Dermatology - Department of Clinical Medicine and Surgery, University of Naples Federico II, Naples, Italy

Corresponding Author: Elisa Camela

Department of Dermatology – University of Naples Federico II, Via Pansini, 5 80131 Napoli, Italy, Tel: +39 - 081 -7462457 Fax: +39 - 081 - 7462442

Email: elisacamela@gmail.com

ORCID: 0000-0001-7201-9163

Key words: COVID-19; SARS-COV-2; drug reaction; symmetrical drug-related intertriginous flexural exanthema; vaccination; vaccine.

Word counts: 380

Reference count: 7

Total number of photographs: 1

Conflicting Interest: none declared

Funding source: none

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process which may lead to differences between this version and the [Version of Record](#). Please cite this article as doi: [10.1111/dth.15881](https://doi.org/10.1111/dth.15881)

This article is protected by copyright. All rights reserved.

Dear Editor,

We have read with great interest the article recently published by Manaa et al. who reported a case of symmetrical drug-related intertriginous and flexural exanthema (SDRIFE)-like eruption associated with COVID-19 vaccination.¹ We herein describe an analogous case that was referred at the Dermatology Unit of the University Hospital of Naples Federico II, in May 2022. A 67-year-old woman presented with an erythematous rash involving bilaterally and symmetrically the flexures (axillary, antecubital, submammary, intergluteal) and the groin (Figure 1). Associated symptoms were hitch and burning sensation. The rash appeared 20 days after the second dose of COVID19 vaccine (Pfizer–BioNTech mRNA vaccine) and did not improve with topical corticosteroids. Patient's medical history included maculopathy, for which she used to undergo bi-yearly intraocular injection of corticosteroids for more than 10 years. Routinary, she did not take any medication and no new agents were introduced at the time of rash onset. Dermatological examination revealed the presence of sharply demarked erythematous plaques exclusively on the flexures, with no mucosal involvement. Routine blood tests, including complete blood count, renal and hepatic functions as well as electrolytes, were unremarkable. A skin biopsy revealed the presence of epidermal parakeratosis, hyperkeratosis, acanthosis, spongiosis with mild lymphocyte exocytosis. At the dermal level, perivascular lympho-histiocytic infiltration and erythrocyte extravasation was described. The clinical and histological features along with the temporal correlation with the vaccination, favored a diagnosis of SDRIFE following COVID19 vaccination. SDRIFE is a type IV delayed hypersensitivity reaction usually triggered by systemic drugs, mainly antibiotics.^{2,3} Other reported agents are anti-inflammatory drugs, antihypertensives, but also chemotherapeutics monoclonal antibodies and iodine radio-contrast media.^{3,4} To date 5 cases of SDRIFE following COVID19 vaccination, either Coronavac, Pfizer or Astrazeneca, have been described.^{1,5-7} Time to occurrence varies

between 1 to 6 weeks from the vaccination and the rash may follow the first, second or third dose.^{1,5-7} Treatment is usually based on topical and/or oral corticosteroids, and in case of non-response, cyclosporin.¹ In our case, systemic corticosteroid (prednisone 30 mg/die) for 2 weeks, slowly titting it over 6 weeks, let us achieve complete regression of clinical manifestations. Given the worldwide campaign of COVID19 vaccination and further booster doses, we suppose to observe an increase in the number of SDRIFE cases; hence, physicians should be aware of this possible drug reaction.

Informed consent: the patient gave informed consent in publishing her case details and pictures

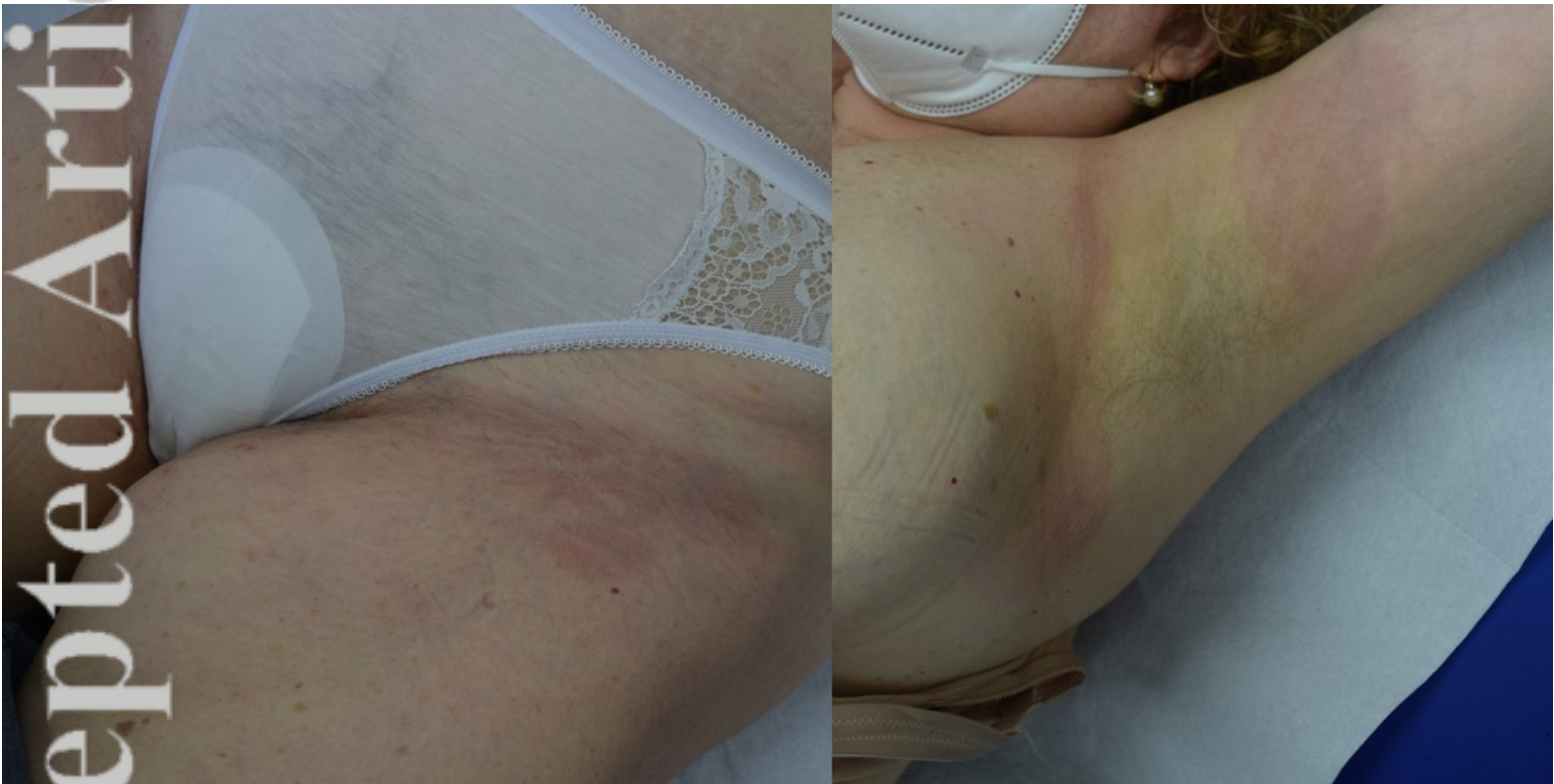
Acknowledgments: **E. Camela:** conceptualization, validation, visualization, writing-original draft preparation, writing - review and editing. **M. Scalvenzi:** conceptualization, data curation, formal analysis, investigation, visualization, writing-original draft preparation. **M. Megna:** data curation, investigation, methodology, visualization, writing-original draft preparation. **L. Potestio:** data curation, investigation, methodology, visualization, writing-original draft preparation. **G. Fabbrocini:** data curation, validation, visualization, writing-original draft preparation. **G. Guerrasio:** data curation, validation, visualization, writing-original draft preparation. **L. Fornaro:** data curation, validation, visualization, writing-original draft preparation. **C. Costa:** conceptualization, validation, visualization, writing - review and editing, supervision. All authors read and approved the final version of the manuscript.

References

1. Manaa A, Ziv M, Krausz J, Dodiuk-Gad RP. A case of symmetrical drug-related intertriginous and flexural exanthema-like eruption associated with Pfizer COVID-19 vaccination. *Dermatol Ther*. Published online April 2022:e15546. doi:10.1111/dth.15546
2. Megna M, Camela E, Ocampo Garza SS, et al. Ciprofloxacin-induced symmetrical drug-related intertriginous and flexural exanthema (SDRIFE) in a psoriasis patient. *Contact Dermatitis*. 2021;85(4):467-469. doi:10.1111/cod.13882
3. Lima Miranda O, Martins J, Almeida A, et al. Symmetrical Drug-related Intertriginous and Flexural Exanthema (Baboon Syndrome). *Eur J case reports Intern Med*. 2021;8(12):3029. doi:10.12890/2021_003029
4. Megna M, Cinelli E, Napolitano M, Fabbrocini G, Patrino C. Paracetamol-induced symmetrical drug-related intertriginous and flexural exanthema (SDRIFE) in a psoriasis patient receiving apremilast therapy. *Contact Dermatitis*. 2019;81(6):451-454. doi:10.1111/cod.13358
5. Hai J, Shawa H, Kim-Lim P, et al. Systemic drug-related intertriginous and flexural exanthema induced by the Pfizer-BioNTech COVID-19 vaccine: A report of 2 cases. *JAAD case reports*. 2021;18:57-60. doi:10.1016/j.jdc.2021.10.016
6. Orenay OM, Balta I, Yigit D, Eksioğlu M. Systemic drug-related intertriginous and flexural exanthema like eruption after CoronaVac vaccine. *J Eur Acad Dermatol Venereol*. 2021;35(10):e634-e635. doi:10.1111/jdv.17454
7. Lim PN, Wylie G. Symmetrical drug-related intertriginous and flexural exanthema like eruption associated with COVID-19 vaccination. *Clin Exp Dermatol*.

Figures

Figure 1. Clinical manifestations of SDRIFE following COVID19 vaccination: erythematous plaques involving the flexures bilaterally



DTH_15881_Figure 1.jpg