

LETTERS TO THE EDITOR

Pemphigus vulgaris and COVID-19 vaccination: Management and treatment

Dear Editor,

It has now been about a year and a half since the start of COVID-19 vaccination.¹

Reports about new onset or worsening manifestations of pemphigus vulgaris have been various; different pathogenetic mechanisms have been proposed that could correlate vaccination with these events.^{2,3} In this context, we recently published our experience on 32 pemphigus vulgaris (PV) patients at the Dermatology Centre of the University of Naples Federico II. All subjects performed three COVID-19 vaccine doses (mRNABNT162b2 and mRNA-1273 were the vaccines administered). We observed that 21.9% ($n = 7$) PV patients experienced disease worsening of new lesions development.⁴

Notably, all patients were under control before vaccination, being under oral corticosteroid \pm azathioprine. PV worsening showed a range of onset of 5–11 days after vaccination. These relapses were usually easily managed increasing oral corticosteroid dosage, and all patients completed the vaccination cycle.⁴

Differently from data emerging from the literature,² we believe that, given the already reported PV onset or exacerbation following other vaccinations such as influenza or tetanus,^{5,6} a hyperimmune-induced reaction in genetically predisposed individuals or a cross-reaction of vaccine antigens with pemphigus antigens could also be hypothesized. All this would allow PV worsening to possibly be related to COVID-19 vaccination.

Our experience differs from those presented in the literature since we reported a larger sample size with both vaccines currently available in Italy (mRNABNT162b2/3 and mRNA-1273/3). Although in our experience, PV worsening were well managed without any consequences on either the course of the disease or the efficacy of vaccination, we believe it is useful to point out that vaccine induced PV onset or worsening may also be not easy for clinicians to manage in some cases.^{7,8} Fortunately, in our study, most PV patients (80%) showed no impact on the disease and the remaining were managed increasing corticosteroid dosage without significant complications.

Our data reinforce the importance and safety of the COVID-19 vaccine campaign especially in frail patients with rare diseases such as PV where treatment adjustment may be performed in individual at more elevated risk to disease worsening. Certainly, vaccination could have an impact on the management of these patients, but this should not discourage the patients themselves from undergoing vaccination.⁹

In conclusion, we believe that 2 years after vaccination started now, a common point needs to be reached to be able to explain the possible correlations of these events.

Certainly, further studies with a larger sampling are needed to investigate the impact of COVID-19 vaccination on the course of PV, in particular, we believe that action should be taken on the prevention of post-vaccination exacerbations and the related treatment algorithm.

AUTHOR CONTRIBUTIONS

Fabrizio Martora involved in conceptualization, validation, visualization, original draft preparation, review, and editing. **Teresa Battista** involved in conceptualization, validation, visualization, original draft preparation, review, and editing. **Gabriella Fabbrocini** involved in conceptualization, validation, visualization, review, editing, supervision, validation, and visualization. **Paola Nappa** involved in conceptualization, validation, visualization, review and editing, and supervision. **Matteo Megna** involved in conceptualization, validation, visualization, review and editing, and supervision. **All authors read and approved the final version of the manuscript.**

CONFLICT OF INTEREST

None to declare.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no datasets were generated or analyzed during the current study.

ETHICAL APPROVAL

None.

INFORMED CONSENT

Patients gave the consent for photo acquisition and publication.

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