

Adverse events to corona vaccines:

Covid arm

Case report

A 70-year-old dermatologist received a first Pfizer-BioNtech vaccine on the fifth of March (day 1). The next day she experienced some fatigue and loss of appetite. On day 2 and day 3 the injection site was indurated and painful. Everything turned to normal again for one week. On day 8, the injection site started to itch and was mildly indurated. On day 9 the induration was more pronounced and erythema appeared on the injection site spreading over the upper arm (Fig. 1). There were no systemic symptoms except some fatigue. Spontaneous regression of the redness and infiltration was noticed in the next days. The second shot of Pfizer-BioNtech vaccine is programmed on day 21.

Questions

- Diagnosis: is this an allergic reaction?
- Treatment?
- What about the second vaccination?

A search for information offered the following answers

The Centers for diseases control and prevention clearly differentiates immediate and early reactions occurring within 4 hours of vaccination, and late reactions as described in the case here above. [1]

Diagnosis: this phenomenon has been reported during the clinical studies and been described as “Covid arm”. The mechanism is still unclear. A recent publication in the NEJM describes 12 cases. [2] The authors suspect a delayed-type or T-cell-mediated hypersensitivity reaction based on one biopsy of another case. All 12 patients received a second vaccine. Although half of the patients did not have a recurrence of large local reactions, three patients had recurrent reactions that were similar to those after the initial dose, and three patients had recurrent reactions that were of a lower grade than those after the initial dose.

According to the instructions on the CDC site no treatment is required but antihistamines can be prescribed for the itching and if needed pain medication can help; the second vaccination can take place as scheduled, administration in the opposite arm can be recommended.

The conclusions of the article in the NEJM are shared here with you:

Clinicians may not be prepared to address delayed local reactions to the mRNA-1273 vaccine. Given the scale-up of mass vaccination campaigns across the world, these reactions are likely to generate concerns among patients and requests for evaluation. These reactions have not been consistently recognized, guidance regarding the second dose of vaccine has varied, and many patients have unnecessarily received antibiotic agents. We hope this letter encourages additional reporting and communication regarding the epidemiologic characteristics, causes, and implications of these delayed cutaneous

reactions, since this information might allay the concerns of patients, encourage completion of vaccination, and minimize the unnecessary use of antibiotic agents.

References

1. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/allergic-reaction.html#:~:text=If%20you%20experience%20a%20severe,for%20at%20least%20several%20hours>
2. https://www.nejm.org/doi/full/10.1056/NEJMc2102131?query=featured_coronavirus

If you need more information on “What to do if you have an allergic reaction after getting a COVID-19 Vaccine?”, please see reference 1. or contact you national Covid resource centre.



(Fig. 1)