Petechial skin rash associated with CoronaVac vaccination: first cutaneous side effect report before phase 3 results

Due to the newness of the virus, side effects of vaccines specific to SARS-CoV-2 are not yet known. CoronaVac, a purified inactivated SARS-CoV-2 vaccine developed by Sinovac Biotech (Beijing, China), has been shown to induce SARS-CoV-2-specific neutralising antibodies in mice, rats, non-human primates and in macaques. CoronaVac was shown to be well tolerated and did not cause dose-related safety concerns in phase 1 and 2 clinical studies involving healthy individuals aged 18–59 years and those aged 60 years and older. The most common symptom was injection site pain, and hypersensitivity reactions were the least reported side effects. We do not know the phase 3 efficacy and side effect results of CoronaVac, although vaccination has started. Turkey has decided on the CoronaVac within the vaccine market and is currently continuing the vaccination of elderly people following health workers. Here we share up-to-date data on an elderly person who developed post-vaccination side effects in the form of a petechial rash.

An 82-year-old woman presented with weakness, burning in the legs and a rash. A diffuse petechial rash was observed on both lower extremities during dermatological examination (figure 1A,B). It was learned that she had been vaccinated with CoronaVac 1 day before the petechial rash appeared, and that there were no symptoms other than weakness and burning in the legs approximately 10 hours after vaccination. A complete blood test, routine biochemical parameters, C-reactive protein, D-dimer levels, platelet count and coagulation parameters were normal. Urinalysis showed no signs of proteinuria or haematuria. Serological tests for viral hepatitis and HIV were negative. Antinuclear antibodies, antineutrophil cytoplasmic antibodies and cardiolipin antibodies were within normal ranges. Complement levels and serum proteinograms were normal. PCR and rapid IgM, IgG antibodies for SARS-CoV-2 testing were negative. The patient had been using hydroxychloroquine 400 mg regularly for the last 3 years for seronegative rheumatoid arthritis, and olmesartan for 2 years for hypertension. She was taking no drug other than these and the vaccine. Prednisolone 5 mg, which she had been using for 6 months for seronegative arthritis, was discontinued 3 weeks before the vaccine in order not to prevent the effect of the vaccine. She was diagnosed with petechial rash as a vaccine-induced hypersensitivity reaction based on the clinical picture, history and laboratory analysis. According to the objective causality assessment by the Naranjo probability scale, the causal association between CoronaVac and the petechial rash was probable (Naranjo score=6).

The lesions regressed almost completely after 2 days and completely disappeared after 1 week. In the meantime, when safety in vaccine effect was reported if prednisolone was <20 mg in the newly published guideline by the American College of Rheumatology, the discontinued prednisolone was restarted 1 week after complete remission of the rash and this time, while she was using it for 2 weeks, the corresponding second dose of vaccine was administered. Probably as a result of this, no skin reaction was observed after

Figure 1  (A) Close view of the petechial rash on the right leg. (B) Bilaterally located petechial rash in the lower extremities.
of the manuscript. İK took part in the diagnosis and patient evaluation and reviewed the article.

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**ORCID iD** Filiz Cebeci http://orcid.org/0000-0002-9109-3892

**REFERENCES**


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