



## COVID-19 vaccination rate and side effects in CVID patients over the age of 12

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### Dear editor

I have read the article titled to ‘COVID-19 vaccine hesitancy—reasons and solutions to achieve a successful global vaccination campaign to tackle the ongoing pandemic’ by Dhama et al. with great interest.<sup>1</sup> We also want to share our experience on COVID-19 vaccine hesitancy in our primary immunodeficiency disease, especially common variable immunodeficiency disease (CVID), patients.

We know that the most powerful weapon against coronavirus disease 2019 (COVID-19) is vaccination.<sup>2</sup> We wanted to evaluate the vaccination rate of our CVID patients receiving immunoglobulin replacement therapy in our society where anti-vaccination behavior (vaccine hesitancy) is increasing day by day.<sup>3</sup>

In this study, 20 patients over the age of 12, out of 95 patients who received immunoglobulin replacement therapy with the diagnosis of primary immunodeficiency diseases in our clinic, were evaluated.

Thirteen of the 20 CVID patients (65%) included in the evaluation had been vaccinated against COVID-19. Nine of these patients received at least two doses of inactivated virus Sinovac® (Sinopharm), three of them at least two doses of mRNA BioNTech®, and one of them received two doses of Sinovac and one dose of BioNTech vaccines. Post-vaccination side effects were observed in 4 of 13 vaccinated patients. It was learned that among the patients who received the Sinovac vaccine, one patient had a headache for 1 day after the first dose, one patient had pain in the arm after the third dose, and one patient had a headache, joint pain, and fever for 3 days after the second dose. In the patient who received one dose of BioNTech vaccine after two doses of Sinovac, darkening of the eyes, dizziness, and fainting occurred 10 minutes after the BioNTech vaccine, and the patient came to his senses 5 minutes later. This condition was evaluated as vasovagal syncope. During the follow-up period of at least 5 months, there was no reported complication due to these vaccinations. Vaccination was discussed with the rest of seven patients who were not vaccinated, and patients and their families were tried to be persuaded for vaccination.

Our vaccination rate seems to be relatively low. In this limited experiment, both inactivated virus Sinovac® and mRNA BioNTech® vaccine applications in our CVID patients look safe and reliable. No serious side effects were seen due to either inactive or mRNA vaccinations.

Results from COVID-19 vaccine applications involving thousands of participants worldwide show that efficacy is remarkably high and the rate of serious side effects low.<sup>4</sup> We believe that COVID-19 vaccines offer potential benefits with minimal risk, even in immunodeficient individuals involving CVID patients.<sup>5–7</sup> We strongly support the vaccination of our immunocompromised or immunodeficient patients and encourage our patients and their families in this regard.<sup>8</sup>

### Abbreviations

CVID	common variable immunodeficiency disease
COVID-19	coronavirus disease 2019

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