LETTER TO THE EDITOR
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COVID-19 in patients treated with intravesical Bacillus Calmette Guerin

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Dear Editor,

We would like to share ideas on the publication "Investigation of the frequency of COVID-19 in patients treated with intravesical BCG". Karabay et al. concluded that "Intravesical BCG administration does not decrease the frequency of COVID-19 infection[1]." Indeed, effect of BCG on COVID-19 is an interesting issue. While some authors show that BCG might be useful, others present totally discordant ideas. A common consideration on any report of the BCG effect on COVID-19 is the confounding factor. Theoretically, by molecular mechanism via tertiary lymphoid structure (TLS) organogenesis[2,3], BCG might be useful. Trained immunity might occur after BCG vaccination. However, it is necessary to allow a period for immune training. From the observation by Karabay et al.[1], it might be interesting to assess time effect. Additionally, many confounding factors can affect the observed frequency of COVID-19[4]. In the report by Karabay et al.[1], the number of subjects are also few. A larger study might give different results.

AUTHORS' CONTRIBUTIONS

RM: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. **VW:** Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing.

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