Is cyclosporine a preferred calcineurin inhibitor in COVID-19-infected renal transplant recipients? we are not sure Ahmed M. Daoud^a, Karim M. Soliman^b, Mahmoud M. Mahmoud^c, Hatem K. Ali^d

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Dear editor,

Some authors suggest that cyclosporine may be preferred as a calcineurin inhibitor owing to its antiviral properties. We have read with great interest the letter to the editor written by Kemmner et al. [1] about a 45-year-old male renal transplant recipient (RTR) who was successfully cured of COVID-19 pneumonia after requiring mechanical ventilation. The patient was solely on mofetil mycophenolate as maintenance immunosuppression. During the course of management, mycophenolate mofetil was substituted with low-dose cyclosporine. The authors assumed that switching to cyclosporine may represent a therapeutic option for COVID-19-infected RTRs. Coates et al. [2] suggested that switching from tacrolimus to cyclosporine is a potential avenue for future exploration. The hypothesis that cyclosporine is the preferred calcineurin inhibitor is based on the proven in-vitro antiviral effect of cyclosporine against various corona viruses at noncytotoxic concentrations [3].

Likewise, tacrolimus was found to inhibit the in-vitro replication of various corona viruses including severe

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> acute respiratory syndrome-coronavirus at low noncytotoxic concentrations [4]. Hence; we do agree that calcineurin inhibitor-based therapy in COVID-19-infected RTRs might carry a therapeutic antiviral property; however, the advantageous effect of cyclosporine over tacrolimus remains uncertain.

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Conflicts of interest

There are no conflicts of interest.

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