

EDITORIAL

SARS-CoV-2: Reflection beyond the lungs

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As we progress into the endemic phase of COVID-19, is it a new beginning or back to the usual life? The lesson learnt in this pandemic is life is fragile and we need to be prepared, resilient and adaptable. In this issue, Malik (2022)¹ described the transmissibility and virulence of COVID-19 variants and Sari *et al.* (2022)² described the changes in skin biopsy samples received in the dermatology unit in Indonesia, comparing before and during the COVID-19 pandemic.

Curiously, how much do we know about the effects of different SARS-CoV-2 variants on placenta and pregnancy? Studies have suggested that placenta play a role in protecting against vertical transmission of SARS-CoV-2 to the fetus. Study showed ACE2 is shed from the placenta into the bloodstream in the third trimester to minimise the ability of virus to infect the placenta.³ In our previous issue, Azizan *et al.* (2020)⁴ described the role of ACE2 in SARS-CoV-2 infectivity. Study revealed that SARS-CoV-2 spike protein antibody staining was rarely observed in placentas from mothers with COVID-19 infection. There was only one case that showed evidence of SARS-CoV-2 placentitis, also known as chronic histiocytic intervillitis with SARS-CoV-2 spike protein positivity in the placenta. Interestingly, the baby was born unremarkable.⁵ What if there is concurrent intraamniotic infection with other bacteria or fungus like *Candida* chorioamnionitis? How does this affect the placenta of mother also with COVID-19 infection?⁶ Interestingly, *Gardnerella vaginalis* infection in pregnancy could result in increased syncytial knot formations in the placentas.⁷⁻⁸ This may represent a sign of fetal hypoxia, which is also a feature seen in placentas of SARS-CoV-2 maternal infection.⁹

Keywords: Pandemic, placenta, pregnancy, SARS-CoV-2

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