

COVID-19 Reinfection in a Healthcare Worker; Is There a Definitive Immunity Against SARS-CoV-2?

Ahmadi Sayyed Reza, Anvari Ardakani Saeideh, Kalani Navid, Habibzadeh Seyed Reza, Vafadar Moradi Elnaz, Foroughian Mahdi.

Abstract:

Introduction: While our knowledge is limited about COVID-19 immunity, recent cases of reinfection have raised concerns. Case presentation: Here, we report a case of COVID-19 reinfection after three months from recovery in a healthcare worker with negative IgM and IgG at the second infection and positive nasopharyngeal swab Reverse transcription polymerase chain reaction (RT-PCR) test despite being discharged with two negative RT-PCR tests at the first admission. Symptoms at first admission were fever, headache, sore throat, diarrhea, and vomiting and got changed to myalgia and anosmia. Conclusion: The strength of this case report is the long period (three months) between the infection and reinfection while other cases reported in literature were reinfected less than one month after their first infection.

Keywords: Case Report, COVID-19, Immunity, Reinfection, SARS-CoV-2