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Objectives: Data comparing the immunogenicity of Sputnik-V and Sinopharm vaccines in seropositive and seronegative groups are lacking. We compared the immunogenicity of Sputnik-V (Gam-COVID-Vac) and Sinopharm (BBIBP-CorV) vaccines in seronegative and seropositive groups. **Methods:** In total, 60 adults participated in the study. The immune response after vaccination was assessed using enzyme immunoassay. IgG levels were measured in all participants at 3 time points: before vaccination, 42 days after the first vaccine dose, and 6 months after the first vaccine dose. The results of the SARS-CoV-2 antibody test were quantified according to the WHO First International Standard and expressed in international units (BAU per mL). **Results:** The study participants were divided into 2 groups: 30 people (50%) were vaccinated with Sputnik-V (Gam-COVID-Vac) and 30 people (50%) were vaccinated with Sinopharm (BBIBP-CorV). The groups had no difference in sex composition. The highest antibody levels were observed 42 days after vaccination in both the seronegative group ($P = .006$) and the seropositive group ($P < .001$). At 6 months after vaccination, the IgG value declined much farther among the seronegative group ($P = .003$) compared to those who had recovered from COVID-19 before vaccination. However, the “hybrid immunity” generated by the Sputnik-V vaccine had greater strength and duration ($P < .001$). **Conclusions:** This study showed that IgG levels in vaccinated individuals who previously recovered from SARS-CoV-2 infection (“hybrid immunity”) were higher than in SARS-CoV-2-naïve individuals. In a comparative part of the study, the Sputnik-V vaccine had greater strength and duration of immune response across the 6-month observation period ($P < .001$).

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Laboratory-acquired COVID-19 during the SARS-CoV-2 o (omicron) pandemic wave at a tertiary-care hospital in Korea

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Objectives: Laboratory-acquired infection (LAI) of SARS-CoV is well known, but MERS-CoV or SARS-CoV-2 LAI has not yet been reported. Beginning last November, COVID-19 cases increased among laboratory staff at our 2,700-bed tertiary-care hospital. A 7-day home-quarantine policy for healthcare workers when household members were confirmed with SARS-CoV-2 was lifted February 28. We investigated LAI and its risk factors. **Methods:** From March 21 to 25, all confirmed cases of COVID-19 among 176 laboratory staff were surveyed with questionnaire to collect the following data: symptom onset and period, SARS-CoV-2 PCR-positive sample date, age, sex, infection in household members, close contact with COVID-19 confirmed staff, work type, work unit, possibility of LAI and LAI risk factors. **Results:** In total, 54 laboratory staff (30.1%) were confirmed with SARS-CoV-2 infection; first 1 person on November 28 and 1 person on November 30, 2021, then 13 in February 2022 and 39 later in 2022. Overall, 22 cases had previously infected household members, and 9 cases suspected that they had had hospital contact with an infected patient through phlebotomy or bedside tests. In total, 25 cases of possible LAI mainly occurred in clusters of 3, 6, or 7 people through person-to-person transmission of a coworker who had an infected family member. The remaining 9 cases, including 1 sample receptionist, 2 urine analysis technicians, and 6 SARS-CoV-2 PCR test staff, may have been infected through an infected sample. However, person-to-person transmission was still possible because most shared a changing room and lounge in the same work unit. **Conclusions:** The most important cause of LAI is person-to-person transmission between coworkers; therefore, home quarantine is an effective measure to prevent LAI when a household member is infected with

SARS-CoV-2. Handling of infected specimens may be the second most common cause of LAI.

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Time-based deisolation of generally asymptomatic immunocompetent COVID-19 patients on day 8 of infection to clean wards is safe

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Objectives: The National University Hospital (NUH) is a tertiary-care teaching hospital in Singapore with 60% of patients in 6–8-bed cubicles. NUH recently changed to a time-based deisolation criterion for immunocompetent COVID-19 patients in cohort wards who are afebrile and improved but did not meet the antigen rapid test negative criteria at day 5–6 and who required continued hospital care. The MOH guidelines and studies of viral load trajectory from the SARS-CoV-2 δ (delta) variant suggest that by day 8 of infection, viral loads drop and the risk of transmission is low. We defined a cycle threshold (Ct) value ≥ 25 as the point at which virus cultures are negative. We assessed whether a time-based deisolation at day 8 correlated with Ct ≥ 25 during the SARS-CoV-2 o (omicron) variant pandemic surge. **Methods:** Data for patients and staff with confirmed positive COVID-19 PCR between January to March 2022 were collected. These data comprised a convenience sample collected retrospectively by the epidemiology team and the obstetrics and gynecology team and were used to deisolate patients. Nasopharyngeal (NP) swabs were sent for PCR for all admissions, to confirm diagnosis, for deisolation and/or transfer, and for staff suspected to have COVID-19 as part of hospital staff policy. **Results:** Overall, 403 observations were obtained. For 145 NP swabs tested by SARS-CoV-2 PCR on day 1, the median Ct value was 19.55 (IQR, 9.01). The median Ct for 87 observations on day 2 was 15.95 (IQR, 3.45). The median Ct value for 14 observations on day 8 was 24.22 (IQR, 5.19). From day 9 to day 37, with 47 observations, the Ct was generally > 25 . **Conclusions:** During the SARS-CoV-2 o (omicron) surge, NP swabs sent on day 8 had a median Ct value of 24.22. After day 8, the median Ct was > 25 . The discontinuation of isolation precautions on day 8 balances the use of dedicated COVID-19 beds with risk mitigation of transmission for recovered patients who require ongoing hospitalization. Small sample size and heterogeneous reasons for testing NP swabs after day 5 likely skewed our results and limits the generalizability of our results.

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Controlling SARS-CoV-2 infection in inpatients through a grouping system at Ho Chi Minh Children’s Hospital 1 in Vietnam

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Objectives: At the onset of COVID-19, whenever SARS-CoV-2 was detected at Children’s Hospital 1 (CH1), the related department or building was closed for extensive tracing, testing, and medical isolation. This process disrupted