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Clinical and immune response characteristics among vaccinated persons infected with SARS-CoV-2 delta variant: a retrospective study

Key words: SARS-CoV-2, Delta variant, Vaccine, Hospitalization, Immune response

Research Summary

This study aimed to observe the clinical and immune response characteristics of vaccinated persons infected with the delta variant of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in Yangzhou, China.

Main conclusion

- **Two doses of the SARS-CoV-2 inactivated vaccine were highly effective at limiting symptomatic disease and reducing immune response, while a single dose did not seem to be effective.**

Highlights

- Patients who completed two doses of vaccination showed higher lymphocyte counts and lower levels of C-reactive protein, IL-6, and D-dimer during hospitalization.
- IgG levels were significantly higher in the two-doses group than in the unvaccinated group at admission.
- Completion of two doses of vaccine injection can reduce the length of hospital stay and increase the negative virus conversion rate of patients with delta variant infection.