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SARS-COV-2-vaccine-inactivated-Sinovac-Biotech/tozinameran

Subacute thyroiditis and Grave's disease: 19 case reports

In a case-series conducted from January 2021 to October 2021, 19 patients including 16 women and 3 men (aged 29-72 years), were described, who developed subacute thyroiditis (SAT) or Grave's disease (GD), following administration of SARS-COV-2-vaccine-inactivated-Sinovac-Biotech or tozinameran for COVID-19 vaccination [routes and dosages not stated].

All the patients received SARS-COV-2-vaccine-inactivated-Sinovac-Biotech [CoronaVac; 12 patients] or tozinameran [BNT162b2; 7 patients] for COVID-19 vaccination. Eight among the 19 patients had a history of thyroid disease including nodular thyroid disease, subacute thyroiditis, multinodular goiter, autoimmune thyroiditis, ankylosing spondylitis, Hashimoto's thyroiditis or diabetes insipidus. One among the 19 patients also had a history of subtotal thyroidectomy. Following 1-15 days after first or second dose of vaccination, the patients presented with neck pain, palpitations, myalgia, fatigue or fever. After various laboratory investigations, the patients were diagnosed with vaccination-induced SAT (15 patients) or GD (4 patients).

For SAT, the patients were treated with methylprednisolone, prednisolone, prednisone, indomethacin or paracetamol. Consequently, 11 patients achieved remission of SAT in 4-18 weeks, while four patients did not achieve complete remission after treatment. For GD, two patients were treated with thiamazole [methimazole], while one patient received levothyroxine-sodium, which was discontinued later. One patient did not require any treatment. Two patients with GD achieved complete remission; however, one patient developed hypothyroidism after week 20, while two patients did not achieve complete remission after treatment.

A total of 9 patients received repeat doses of SARS-CoV-2 vaccines following a diagnosis of SARS-CoV-2 vaccine-induced SAT. Seven among 9 patients, did not develop SAT recurrence, while two patients developed worsening symptoms of SAT, which necessitated treatment initiation. Besides, in fear of a recurrence, one patient received her second vaccination after one month than indicated as SARS-COV-2-vaccine-inactivated-Sinovac-Biotech instead of tozinameran, yet no recurrence was observed. One patient received repeat doses of SARS-CoV-2 vaccines following a diagnosis of SARS-CoV-2 vaccine-induced GD; however, no relapse in symptoms or signs of Grave's disease was observed.

Oguz SH, et al. SARS-CoV-2 Vaccine-induced Thyroiditis: Safety of Revaccinations and Clinical Follow-up. Journal of Clinical Endocrinology and Metabolism 107: e1823-e1834, No. 5, 19 Apr 2022. Available from: URL: http://doi.org/10.1210/clinem/dgac049

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