

Letter to the Editor: “Our Response to COVID-19 as Endocrinologists and Diabetologists”

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Stewart et al’s editorial discussed considerations for managing endocrinopathies in the setting of COVID-19 infection caused by the novel coronavirus SARS-CoV-2. Hyperthyroid patients taking thionamide therapy are not considered at higher risk of illness from COVID-19¹. However, the appropriate guidance of hyperthyroid patients taking thionamides who develop symptoms concerning for COVID-19 that could mimic infections due to agranulocytosis should be considered by endocrinologists during this pandemic.

Our clinical practice prior to this pandemic has been to instruct hyperthyroid patients taking thionamides to discontinue drug therapy and obtain a complete blood count with differential in the setting of fever or sore throat to exclude agranulocytosis, a practice that is in accordance with the ATA guidelines². Agranulocytosis is reported in 0.1 to 0.3% of patients taking thionamides^{3,4} and is more likely to occur within the first 90 days of therapy³. Additional risk factors are older age and higher thionamide dose^{3,5}. This is considered a serious side effect with a fatality rate of 4%⁶.

The initial clinical characteristics reported from Wuhan suggest that fever is present in the majority (98.6%) of patients with COVID-19 and throat pain is present in 17.4%, with rates of 33.3% in patients requiring ICU-admission⁷. Lymphopenia, not neutropenia, can be seen in 70%.⁷

Given the possible overlap in symptomatology, it is important to counsel patients taking thionamide therapy who develop fevers and/or pharyngitis during the COVID-19 pandemic. While agranulocytosis is a rare side effect, our opinion is that these patients should still have a CBC performed to exclude a rare but potentially life-threatening diagnosis. However, sending the patient to an outpatient laboratory in the setting of such symptoms may unknowingly place health care workers at risk should the patient ultimately prove to have COVID-19. Therefore, these patients will need to be evaluated in an urgent care or emergency room setting, where the clinical concern for agranulocytosis should be discussed with the triage team prior to arrival, and the patient can be further evaluated with a CBC as well as COVID-19 testing as clinically indicated.

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