

ASSOCIATION THYROID FUNCTION TO PROGNOSIS OF COVID-19: THE SYSTEMATIC REVIEW

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ABSTRACT

Background: *Thyroid disorders have recently been associated with severity in patients with COVID-19, and experts have come together to discuss the association of this medical problem. Studying the relationship is suspected of helping manage the disease and also helps in the follow-up management process.*

Objectives and Methods: *To review the association between thyroid disease and COVID-19 from an extensive literature review. Data from Google Scholar with keywords "thyroid" and "covid" were collected, discussed, and analyzed to answer the following questions:*

- *How does the mechanism of thyroid disease affect Covid patients?*
- *How can thyroid disease make worsen the prognosis of COVID-19 after the infection has occurred?*
- *What is the medical management of thyroid disease in patients with COVID-19?*

Results: *There is evidence that the CoV-2 virus can induce non-permanent but reversible thyroid dysfunction, including thyroid disorders, namely subclinical and atypical thyroiditis. Patients with early thyroid disease are not at increased risk of contracting or transmitting SARS-CoV-2, and early thyroid dysfunction does not promote the worse progression of COVID-19. The presence of glucocorticoids and heparin, respectively, can affect thyroid hormone secretion and function, leading to the possibility of misdiagnosing thyroid dysfunction in severe cases of COVID-19.*

Conclusion: *SARS-CoV-2 can cause short-term thyroid dysfunction and is only reversible. Thyroid disease does not appear to affect the progression of COVID-19. Adequate management of patients with thyroid disease remains necessary during the pandemic.*

KEYWORDS: *COVID 19, Progression, Thyroid Dysfunction*

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