

DOI: <https://doi.org/10.56936/18290825-2.v19.2025-120>**BRUCELLOSIS CO-INFECTION IN A COVID-19 PATIENTS;
A CROSS SECTIONAL DESCRIPTIVE ANALYTICAL STUDY****BAGHERI T.¹, MANZOURII L.¹, RAVANKHAH S.², VAFAIE F.³, SAEIDINEJAD Z.¹,
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ABSTRACT

Objective. *Brucellosis is a global zoonotic infection with multisystem involvement. It typically presents with fever, chills, anorexia, malaise, musculoskeletal pain, and arthralgias - symptoms which are also associated with Coronavirus Disease 2019 (COVID-19). This study aimed to investigate the relative frequency of brucellosis in COVID-19 patients and its association with the severity of COVID-19.*

Method and materials. *In this cross-sectional, descriptive-analytical study, 180 COVID-19 patients referred to the Mofatteh Clininc of Yasuj during 2021-2022 were enrolled. The patients were divided into two groups: brucellosis positive (n=40) and brucellosis negative (n=140). The distribution of demographic characteristics and clinical symptoms among COVID-19 patients was compared based on their brucellosis test results. The association between the severity of COVID-19 and brucellosis status was evaluated.*

Results. *Among the 180 COVID-19 patients, 22.2% (n =40) were brucellosis positive based on the 2-Mercaptoethanol test, and the frequency of brucellosis in COVID-19 patients was significantly higher (P = 0.009). Clinical manifestations such as musculoskeletal pain, fever and sweating were associated with Malta fever (P<0.05), while anorexia and chills were not significantly different between brucellosis-positive and brucellosis-negative COVID-19 patients (P>0.05). There was a significant difference in the dairy consumption between brucellosis-negative and brucellosis-positive COVID-19 patients (P< 0.001). COVID-19 was more severe in brucellosis positive patients (P= 0.009).*

Conclusion. *Brucellosis is an endemic disease in Iran. It is important to examine the patient's history for possible exposure to Brucella. This etiology should be considered in the differential diagnosis of patients presenting with persistent fever, musculoskeletal pain, and chills in endemic areas during the COVID-19 pandemic. Moreover, the COVID-19 pandemic has negatively affected the diagnosis and treatment of brucellosis.*

KEYWORDS: *Brucellosis, COVID-19, Dairy consumption***CITE THIS ARTICLE AS:**

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