

Elevated of Interleukin-6 Serum Levels in Pregnant Women with Corona Virus Disease 2019

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Abstract : Introduction: The potential impact of coronavirus disease 2019 (COVID-19) on the health of expectant mothers and fetuses has strained attention. Pregnant women are considered a vulnerable category to respiratory infections. Moreover, several inflammatory cytokines are 2-100 times more abundant in COVID-19 with cytokine storms than in normal individuals; interleukin 6 (IL-6) exhibits much higher elevations. Investigating potential relationships between IL-6 serum levels and the severity of COVID-19 symptoms in pregnant women is the aim of this study. Material and Methods: Sixty-two eligible pregnant women were divided into a positive COVID-19 group (n=31) and a negative COVID-19 group (n=31) in this cross-sectional study. The research subjects were selected using consecutive sampling. The IL-6 was measured from a vein blood specimen using ELISA methods. Results: The COVID-19 positive group had a higher median IL-6 serum level (45.35 (35.15- 153.99) vs. 38.86 ± 11.43 (15.02-59.52), $p=0.03$) than the negative group. On the other hand, the IL-6 serum level had comparable value according to the COVID-19 symptoms severity (88.35 ± 36.14 ng/mL vs. 51.09 ± 25.48 ng/mL vs. 56.02 ± 33.20 ng/mL in moderate symptoms, mild symptoms, and asymptomatic, respectively; $p=0.152$). Conclusion: Although the IL-6 serum levels are not related to COVID-19 symptoms severity, an elevated of this biomarker was found in pregnant women with affected diagnoses.

Keywords : interleukin-6, pregnancy, COVID-19, several inflammatory

Conference Title : ICOG 2024 : International Conference on Obstetrics and Gynaecology

Conference Location : Bali, Indonesia

Conference Dates : January 11-12, 2024