

Lower Plasma Zinc Levels Associated With Increased Risk of Death in COVID-19 Patients

Priscilla Lynch

October 08, 2020

New research presented at the 2020 ESCMID Conference on Coronavirus Disease (ECCVID) suggests that lower levels of baseline plasma [zinc](#) are associated with poorer survival outcomes in patients hospitalised with COVID-19.

The study by Dr Roberto Güerri-Fernández, Hospital Del Mar, Barcelona, Spain, and colleagues, involved a retrospective analysis of symptomatic COVID-19 patients admitted to a tertiary university hospital in Barcelona, Spain from 15 March to 30 April 2020.

Fasting plasma zinc levels were measured routinely at admission in patients admitted to the COVID-19 unit and computer modelling and statistical analyses were used to assess the impact of zinc on mortality.

Mean baseline zinc levels among the study cohort of 249 patients was 61 mcg/dl. Among those who died (n=21, 8%), baseline zinc levels were significantly lower at 43mcg/dl vs 63.1mcg/dl in survivors.

Having a plasma zinc level lower than 50mcg/dl at admission was associated with a 2.3 times increased risk of in-hospital death (95% CI 1.06-5.01; P=0.034) compared with the patients with a plasma zinc level of 50mcg/dl or higher.

Higher zinc levels were associated with lower maximum levels of interleukin-6 during the period of active infection.

After adjusting by age, sex, severity and receiving hydroxychloroquine, multivariable regression showed each unit increase of plasma zinc at admission to hospital was associated with a 7% reduced risk of in-hospital mortality (0.93, 95% CI 0.89–0.98; P=0.0049).

Expert commentary:

Question: What are the potential clinical implications of your research?

Güerri-Fernández: "We have submitted a paper with this work and some in vitro studies that demonstrate that zinc has some clinical implications in virus control. I believe that if these results are confirmed further studies with zinc supplementation could be done. Moreover, some studies have already been done with zinc and [respiratory infections](#). Probably those patients with lower levels are the ones that would benefit the most."

Follow the latest COVID-19 figures in your region and around the globe with our [interactive COVID-19 map](#)

References

Güerri-Fernández R, et al. Abstract 00177. Lower baseline zinc levels are associated with poorer outcome in COVID-19. ECCVID 2020. 23-25 September 2020.

This article originally appeared on [Univadis.com](#).

Medscape Medical News © 2020

Send news tips to news@medscape.net.

Cite this: Lower Plasma Zinc Levels Associated With Increased Risk of Death in COVID-19 Patients - *Medscape* - Oct 08, 2020.