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Twice-Daily Oral Zinc in the Treatment of Patients With Coronavirus Disease 2019: A Randomized Double-Blind Controlled Trial

Saoussen Ben Abdallah [1], Yosra Mhalla [2], Imen Trabelsi [3], Adel Sekma [3 4], Rim Youssef [3 5], Khaoula Bel Haj Ali [3 4], Houda Ben Soltane [3 6], Hajer Yacoubi [3 5], Mohamed Amine Msolli [3 4], Nejla Stambouli [7], Kaouthar Beltaief [3 4], Mohamed Habib Grissa [3 4], Meriem Khrouf [3 6], Zied Mezgar [3 6], Chawki Loussaief [8], Wahid Bouida [3 4], Rabie Razgallah [9], Karima Hezbri [10], Asma Belguith [11], Naouel Belkacem [12], Zohra Dridi [13], Hamdi Boubaker [3 4], Riadh Boukef [3 5], Semir Nouira [3 4]

Affiliations
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Erratum in

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Abstract

Background: Zinc supplementation has been considered a potential therapy for coronavirus disease 2019 (COVID-19). We aimed to examine zinc efficacy in adult patients with COVID-19 infection.

Methods: We conducted a prospective, randomized, double-blind, placebo-controlled multicenter trial. Patients who were tested positive for COVID-19 without end-organ failure were randomized to oral zinc (n = 231) or matching placebo (n = 239) for 15 days. The primary combined outcome was death due to COVID-19 or intensive care unit (ICU) admission ≤30 days after randomization. Secondary outcomes included length of hospital stay for inpatients and duration of COVID-19 symptoms with COVID-19-related hospitalization for outpatients.

Results: 190 patients (40.4%) were ambulatory and 280 patients (59.6%) were hospitalized. Mortality at 30 days was 6.5% in the zinc group and 9.2% in the placebo group (OR: .68; 95% CI .34-1.35); ICU admission rates were, respectively, 5.2% and 11.3% (OR: .43; 95% CI .21-.87). Combined outcome was lower in the zinc group versus the placebo group (OR: .58; 95% CI .33-.99). Consistent results were observed in prespecified subgroups of patients aged <65 years, those with comorbidity, and those who needed oxygen therapy at baseline. Length of hospital stay was shorter in the zinc group versus the placebo group (difference: 3.5 days; 95% CI 2.76-4.23) in the inpatient group; duration of COVID-19 symptoms decreased with zinc treatment versus placebo in outpatients (difference: 1.9 days; 95% CI .62-2.6). No severe adverse events were observed during the study.

Conclusions: Our results showed that, in COVID-19 patients, oral zinc can decrease 30-day death, ICU admission rate and can shorten symptom duration. Clinical Trials Registration. ClinicalTrials.gov, NCT05212480.

Keywords: COVID-19; SARS-CoV-2; outcome; zinc.

Comment in

A Potential Role for Zinc to Enhance Treatment for Coronavirus Disease 2019 (COVID-19)?
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