Lorestan University of Medical Sciences

Faculty of Khorramabad Nursing &Midwifery

Title

The effect of olive leaf extract on clinical and laboratory outcomes of patients with covid-19

A Thesis

Presented for the Degree of Master of Sciences

In Emergency Care Nursing

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Abstract

Introduction

Since the emergence of the novel coronavirus, herbal medicine has been considered a treatment for COVID-19 patients. This study was done to determine the efficacy of olive leaf extract on the outcomes of COVID-19 patients.

Materials and Methods

This randomized, triple-blinded clinical trial was conducted on hospitalized COVID-19 patients. Using block randomization, eligible patients were allocated to the following groups: intervention A received olive leaf extract (250 mg every 12 hours for five days), intervention B received olive leaf extract (500 mg every 12 hours for five days), and the control group received placebo (every 12 hours for five days). The outcomes (vital signs, laboratory tests, and length of hospitalization) were compared by group.

Results

Of the 150 patients randomized into groups, 141 completed the follow-up and were analyzed. On the fifth day of hospitalization, body temperature (MD=0.34, P<0.001), pulse rate (MD=5.42, P=0.016), respiratory rate (MD=1.66, P=0.001), ESR (MD=13.55, P<0.001), and CRP (MD=15.68, P<0.001) of intervention A were significantly lower than the control group, while oxygen saturation (MD= -1.81, P=0.001) of intervention A was significantly higher than the control group. Furthermore, body temperature (MD=0.30, P=0.001), pulse rate (MD=5.29, P=0.022), respiratory rate (MD=1.41, P=0.006), ESR (MD=14.79, P<0.001), and CRP (MD=16.28, P<0.001) of intervention B were significantly lower than the control group, while oxygen saturation (MD= -2.38, P<0.001) of intervention B was significantly higher than the control group.

Conclusion

Olive leaf extract can improve the clinical status of the patients and decrease the length of hospitalization.

Keywords: COVID-19, Herbal medicine, Oleuropein, Olive extract, SARS-CoV-2