Phase-2 trial with three drugs offers hope

Introduction

A phase-2 trial involving participants with mild to moderate coronavirus (COVID-19) illness found no detectable virus within an average seven days of starting treatment with a three-drug regimen compared with 12 days in people in the control group.

Samples tested for the virus comprised nasopharyngeal swab, posterior oropharyngeal saliva, throat swab, and stool samples.

Clinical Improvement

Clinical improvement was also significantly better in those who received the three-drug regimen. Complete alleviation of symptoms was achieved in four days in the intervention group and eight days in the control group. The average hospital stay was also significantly shorter (nine days) in participants who received the three-drug therapy than in the control group (14.5 days). The three-drug regimen was found to be safe.

The three drugs used are:

- **Lopinavir-ritonavir** is used for treating HIV, **ribavirin** for treating chronic hepatitis C virus, and **injectable interferon beta-1b** is used by multiple sclerosis patients.

The researchers had earlier demonstrated that a combination of lopinavir–ritonavir and ribavirin significantly reduced mortality and respiratory failure in patients during the 2003 SARS outbreak.

And interferon beta-1b has previously been shown to reduce viral load and improve lung problems in animal studies of Middle East respiratory syndrome (MERS) coronavirus infection.