



THE EFFICACY OF DEXAMETHASONE AND CYANOCOBALAMIN IN COVID-19 POSITIVE PATIENTS ALONG WITH ECOSPRIN

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ABSTRACT

Introduction- Covid-19 pandemic has affected the population worldwide. Covid mainly targets the respiratory system leading to difficulty in breathing and low levels of SPO₂. The patients, even after being discharged from the hospitals may still experience a few symptoms like weakness, fatigue, and difficulty in breathing for the next few days. Bronchial spasms and lower concentration of SPO₂ make it difficult for daily activities to be performed. This study has been done to study the efficacy of dexamethasone and cyanocobalamin along with Ecosprin on Covid-19-positive patients who experience severe weakness and fever, breathlessness along with bronchial spasms. **Methodology-** O₂% level values of 120 patients were collected during the time of admission at Shambhu Hospital, Kolhapur and simultaneously also on the second day of treatment. Data is analyzed by using paired t-Test. All patients were treated with dexamethasone cyanocobalamin and Ecosprin 150mg once a day and Tab.Deriphylline 300mg BID. **Conclusion-** We came across the conclusion that dexamethasone gives its steroidal action over bronchus and it reduces bronchial spasm, along with Ecosprin 150 leads to reduced blood clotting mechanism which causes less blood thickening, which helps RBCs to carry O₂ effectively, and Cyanocobalamin (B12) gives cellular energy to all red blood cells which also enhances O₂ carrying capacity.

KEYWORDS : Dexamethasone, Ecosprin 150 mg, Cyanocobalamin (B12), Red Blood Cells (RBCs), O₂ carrying capacity.

INTRODUCTION-

Covid pandemic has affected the populations worldwide. Coronaviruses (CoV) cause different diseases varying from common cold towards severe diseases like Middle East respiratory syndrome (MERS-CoV) and severe acute respiratory syndrome (SARS-CoV), also causing death due to pneumonia, respiratory failure, cardiac arrest, kidney failure, or multi-organ failure. The SARSCoV-2 is a new coronavirus strain reported in human beings. It is not possible to differentiate COVID-19 caused by SARS-CoV-2 from other respiratory infections of viral, bacterial, mycotic, or mycoplasma etiology.^[1] Signs of COVID-19 are fever, dry cough, and difficulty in breathing. The spread of virus can be controlled by regular and proper washing of hand, covering of mouth and nose during coughing and sneezing, properly cooking meat and eggs before consuming, and maintaining at least one-meter distance with anyone. This disease is a major threat, as it can be transferred from both symptomatic and asymptomatic carriers, particularly young children (who typically show less pronounced symptoms). Early and accurate detection based on both clinical symptoms and molecular evidence is important for the preliminary, presumptive and confirmatory diagnosis of COVID-19.^[2,3] Patients with conditions such as asthma, atopic and contact dermatitis, and drug hypersensitivity reactions have been seen to be benefited from the use of dexamethasone.^[4] We found that dexamethasone plays important role in reducing bronchial spasm in many covid patients along with blood thinner Cap. Ecosprin 150 mg daily OD. After prescribing the proper regimen immediately after the next day patient becomes less breathless and spasms also reduced, (In covid positive patients blood clotting mechanism gets triggered after that blood becomes thick that leads to less O₂ carrying capacity of Red Blood Cells (RBCs) so Ecosprin plays important role in treating spasm by thinning blood consistency which ultimately results in increased O₂ carrying capacity of Red Blood Cells (RBCs). The name cyanocobalamin derives from the cyanide group attached to the molecule.^[5] It has a role in several methylation reactions in the body.^[6] Aspirin is a cyclooxygenase-1 (COX-1) inhibitor. It is a modifier of the enzymatic activity of cyclooxygenase-2 (COX-2).^[7] Oxygen is essential for ATP generation through oxidative phosphorylation, and therefore must be reliably delivered to all metabolically active cells in the body.^[8,9]

METHODOLOGY

This study was done at Shambhu Hospital, Bambavade, Maharashtra, India. Patients with breathlessness, HTN, and O₂% up to 94% were included in the study. Exclusion criteria are patients along with comorbidities like diabetes mellitus and COPD, patients with conditions such as asthma, atopic and contact dermatitis, and drug hypersensitivity reactions. All vital records have been taken including blood pressure, oxygen% (O₂%), Intramuscular 1 and 1/2 ml dose of dexamethasone along with 1 and 1/2 ml cyanocobalamin is given to patients after using sterile syringe in proper aseptic conditions. After

giving the injection patient was sent back home. O₂% level values of 120 patients were collected during the time of admission and simultaneously also on the second day of treatment. Data is analyzed by using paired t-Test. All patients were treated with dexamethasone cyanocobalamin and Ecosprin 150mg once a day and Tab. Deriphylline 300mg BID.

DISCUSSION-

After collecting all data, present study was done on 120 patients. Significantly we found that all patients treated with dexamethasone and Ecosprin 150 along with cyanocobalamin patients shows drastic changes in their clinical symptoms. Within three to four day's patients get recovered from his complaints majorly breathlessness. Therefore, it is harmless to treat the covid-19 positive patients with O₂% in between 90% to 94%. Red blood cells are most important carriers of O₂ in human body so to enhance the O₂ carrying capacity this medicines plays excellent role. We came to conclusion that introducing this line of treatment gives excellent results in Covid -19 positive patients. This safe and effective treatment will help in all physicians in their IPD as well as OPD levels to get proper outcomes.

CONCLUSION-

In this prospective clinical study, we came across the conclusion that the dexamethasone plays steroidal action over bronchus and it reduces bronchial spasm, along with Ecosprin 150 which leads to reduced blood clotting mechanism. This causes less blood thickening which helps RBCs to carry O₂ effectively, and Cyanocobalamin (B12) gives cellular energy to all red blood cells which also enhances O₂ carrying capacity. Hence, using combination of dexamethasone and cyanocobalamin along with Ecosprin can help to reduce the Covid-19 symptoms (majorly breathlessness) which can provide fast and long-lasting relief to the patients.

CONFLICT OF INTEREST-

There is no any conflict of interest by author.

Authors Contribution:

All authors certify that they have participated satisfactorily in the work to make public responsibility for the content, including involvement in the concept, design, analysis, writing or revision of the manuscript.

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