

Evaluation of efficacy of Methylene Blue in treatment of SARS-CoV2 affected patients with mild to moderate disease requiring oxygen

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Abstract

Methylene Blue (MB) has been a drug since ages used for methemoglobinemia, septic shock, Anaphylaxis, cyanide poisoning. A well known agent, is a cationic thiazine dye that has minimum research available regarding its mechanism of action. It has been seen to improve blood pressure and oxygenation of tissues. MB has been theoretically being studied extensively as potentially it has multiple pathways through which can help in treatment of SARS- CoV2. The studies show MB has virucidal activity in vitro, has also worked by reducing attachment of virus to the receptor cells (ACE2 receptor). The multiple pathway action of MB in the illness also includes that the drug inhibits nitric oxide, having a potential effect on the kinin-kallikrein pathway also affecting the inflammatory pathways. We did a randomised controlled trial after an informed consent from patients, a total of 50 patient were included on basis of available data as per previous studies. Pregnant females, patient with severe renal impairment, G6PD patients were all excluded because of probable adverse effects of MB on them. Out of 50 patients, non of the patients had any severe adverse reaction. None of these patients Progressed to worsen in course of illness. It can be safely concluded after further discussion on the mentioned outcomes in our trial, that the drug is inexpensive, easily available, has potential effects on the disease that need further substantial studies in order for the drug to be approved and used on larger masses for treatment..

Biography

Anupam B Batra has completed his MBBS and MS ENT both from Madhya Pradesh medical science university, (PG class of 2019). He is currently working under National Health Mission targeting better healthcare facilities in Rural India. He has constantly been

working under conditions that favour managing patients in the least of resources possible, due to which this drug caught his attention to be used on the patients when no other recommended drug was freely available in the ongoing pandemic in India. He has previously published other rare diseases/infections related to ENT commonly found in tropical countries in international journal.