## LOW DOSE INDOMETHACIN FOR SYMPTOMATIC TREATMENT OF COVID-19

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**ABSTRACT** At present paracetamol is widely used for symptomatic treatment in Covid-19 with poor results. Indomethacin is a powerful anti inflammatory drug and gives relief in low doses also. We describe our experience in using indomethacin in a small number of patients with Covid-19 including those who would be classied as high risk. The response to indomethacin is rapid and would help reducing hospitalisation during the epidemic.

KEYWORDS Indomethacin, Covid-19, Symptoms

At present in India, only paracetamol is being used as symptomatic treatment for COVID-19. Paracetamol is a poor drug in this context and is often weakly effective at controlling the symptoms of COVID-19.

The use of indomethacin for control of the dry, persistent cough that is a common feature of COVID-19 has been described by Rothstein and colleagues in New York. [1]

Indomethacin is a potent anti-inflammatory agent. The fact that indomethacin also has antiviral activity [2,3] and can suppress cytokine release syndrome (4,5,6) makes it especially useful in this situation.

Many of the patients in the nephrology department have additional risk factors including hypertension, diabetes and immunosuppression and usually self-refer if they fall sick with COVID-19 symptoms.

Our approach is to start treatment with a low dose of indomethacin as early as possible in the course of the disease to reduce the severity of symptoms fever, coughing and musculoskeletal pain. We believe that this can reduce the need for hospitalisation and could also reduce the risk of spreading the disease.

So far, we have treated 17 patients. Of these, 14 patients tested positive by reverse transcriptase-polymerase chain reaction (RT-PCR), and three patients had close contact with con-

firmed COVID-19 but tested negative. All patients were given indomethacin 25mg twice daily. In 14 patients, the symptoms of fever, cough and musculoskeletal pain resolved after two doses. One patient required escalation of dose to 75mg and became asymptomatic after five days. Two patients developed hypoxaemia and were started on intravenous methylprednisolone.

Of the 15 patients who became asymptomatic, four were renal transplant recipients, one on maintenance dialysis, two were more than 80 years of age, three had type 2 diabetes mellitus, and one was obese with body mass index of 35. Normally, even mild cases of COVID-19 have gone to a hospital immediately and been admitted. These 15 patients were comfortable at home and did not ask for hospitalisation.

As reported by Leibowitz and colleagues (1), we have also found that symptoms resolve quickly after one or two doses of indomethacin. Although this is a small number of patients, the response is very good to warrant a larger trial with long follows up.

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S.NO	AGE	SEX	MORBIDITIES	SYMPTOMS
1	67	М	Diabetes Mellitus, Hypertension	Fever, Cough
2	63	F	Rheumatoid arthritis / COPD	Fever, Cough, Diarrhea
3	66	М	Diabetes Mellitus	Fever, Malaise
4	40	М	Obesity, BMI - 35	Fever, Loss of taste
5	35	F	Nil	Fever, Hacking cough
6	39	М	Renal Transplant, Asthmatic Diabetes Mellitus/	Fever, Cough
7	41	М	Diabetes Mellitus/ Hypertension	Fever, Myalgia
8	64	F	CKD / Hypertension	Fever, Breathlessness
9	70	М	CKD / Maintenance Hemodialysis	Fever, Cough
10	40	F	Nil	Fever, Cough
11	46	М	Renal Transplant	Fever
12	82	F	Nil	Fever
13	60	М	Renal Transplant	Fever, Cough
14	37	F	Renal Transplant	Fever, Myalgia, Malaise
15	85	М	Nil	Fever, Malaise
16	14	М	Nil	Fever, cough
17	52	F	Scleroderma	Fever, breathlessness

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## **Conflict of interest**

There are no conflicts of interest to declare by any of the authors of this study.

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