

AIIMS/ ICMR-COVID-19 National Task Force/ Joint Monitoring Group (Dte.GHS)

Ministry of Health & Family Welfare, Government of India

CLINICAL GUIDANCE FOR MANAGEMENT OF ADULT COVID-19 PATIENTS

Revised on 14/01/2022

Adult patient diagnosed with COVID-19

Mild disease

Upper respiratory tract symptoms and/or fever WITHOUT shortness of breath or hypoxia

Home Isolation & Care (Refer to relevant guideline)



MUST DOs

- Physical distancing, indoor mask use, strict hand hygiene
- Symptomatic management (hydration, anti-pyretics, anti-tussive)
- Stay in contact with treating physician
- Monitor temperature and oxygen saturation (by applying a SpO₂ probe to fingers)

Seek immediate medical attention if:

- Difficulty in breathing or SpO₂ < 93%
- High grade fever/severe cough, particularly if lasting for >5 days
- A low threshold to be kept for those with any of the high-risk features*

MAY DOs

Therapies based on low certainty of evidence especially for those with high-risk of progression*

- Inhalational Budesonide (given via Metered dose inhaler/ Dry powder inhaler) at a dose of 800 mcg BD for 5 days) to be given if symptoms (fever and/or cough) are persistent beyond 5 days of disease onset

*High-risk for severe disease or mortality

- Age > 60 years
- Cardiovascular disease, hypertension, and CAD
- Diabetes mellitus and other immunocompromised states (such as HIV)
- Active tuberculosis
- Chronic lung/kidney/liver disease
- Cerebrovascular disease
- Obesity

If cough persists for more than 2-3 weeks, investigate for tuberculosis and other conditions

Moderate disease

Any one of:

1. Respiratory rate \geq 24/min, breathlessness
2. SpO₂ : 90% to \leq 93% on room air

ADMIT IN WARD

Oxygen Support:

- ◆ Target SpO₂ : 92-96% (88-92% in patients with COPD)
- ◆ Preferred devices for oxygenation: non-rebreathing face mask
- ◆ Awake proning encouraged in all patients requiring supplemental oxygen therapy (sequential position changes every 2 hours)

Anti-inflammatory or immunomodulatory therapy:

- ◆ Inj. Methylprednisolone 0.5 to 1 mg/kg in 2 divided doses (or an equivalent dose of dexamethasone) usually for a duration of 5 to 10 days
- ◆ Patients may be initiated or switched to oral route if stable and/or improving
- ◆ There is no evidence for benefit for injectable steroids in those NOT requiring oxygen supplementation, or on continuation after discharge

- ◆ Anti-inflammatory or immunomodulatory therapy (such as steroids) can have risk of secondary infection such as invasive mucormycosis when used too early, at higher dose or for longer than required

Anticoagulation:

- ◆ Conventional dose prophylactic unfractionated heparin or Low Molecular Weight Heparin (weight based e.g., enoxaparin 0.5mg/kg per day SC). There should be no contraindication or high risk of bleeding

Monitoring:

- ▶ Clinical Monitoring: breathing rate, Hemodynamic instability, Change in oxygen requirement
- ▶ Serial CXR; HRCT chest to be done ONLY if there is worsening
- ▶ Lab monitoring: CRP, D-dimer, blood sugar 48 to 72 hrly; CBC, KFT, LFT 24 to 48 hrly

Severe disease

Any one of:

1. Respiratory rate >30/min, breathlessness
2. SpO₂ < 90% on room air

ADMIT IN HDU/ICU

Respiratory support:

- ◆ Consider use of NIV (Helmet or face mask interface depending on availability) in patients with increasing oxygen requirement, if work of breathing is LOW
- ◆ Consider use of HFNC in patients with increasing oxygen requirement
- ◆ Intubation should be prioritized in patients with high work of breathing /if NIV is not tolerated
- ◆ Use institutional protocol for ventilatory management when required

Anti-inflammatory or immunomodulatory therapy:

- ◆ Inj Methylprednisolone 1 to 2 mg/kg IV in 2 divided doses (or an equivalent dose of dexamethasone) usually for a duration 5 to 10 days
- ◆ Anti-inflammatory or immunomodulatory therapy (such as steroids) can have risk of secondary infection such as invasive mucormycosis when used too early, at higher dose or for longer than required

Supportive measures:

- ▶ Maintain euvoemia (if available, use dynamic measures for assessing fluid responsiveness)
- ▶ If sepsis/septic shock: manage as per existing protocol and local antibiogram

Monitoring:

- ▶ Clinical Monitoring: work of breathing, Hemodynamic instability, Change in oxygen requirement
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After clinical improvement, discharge as per revised discharge criteria

EUA/Off label use (based on limited available evidence and only in specific circumstances):

Remdesivir (EUA) may be considered **ONLY** in patients with

- 10 days of onset of symptoms, in those having moderate to severe disease (requiring supplemental oxygen), but who are NOT on IMV or ECMO
- Consider remdesivir for 5 days to treat hospitalized patients with COVID-19 (No evidence of benefit for treatment more than 5 days)
- NOT to be used in patients who are NOT on oxygen support or in home setting
- Monitor for RFT and LFT (remdesivir not recommended if eGFR <30 ml/min/m²; AST/ALT >5 times UNL) (not an absolute contraindication)
- Recommended dose: 200 mg IV on day 1 followed by 100 mg IV OD for next 4 days

Tocilizumab may be considered when **ALL OF THE BELOW CRITERIA ARE MET**

- Rapidly progressing COVID-19 needing oxygen supplementation or IMV and not responding adequately to steroids (preferably within 24-48 hours of onset of severe disease/ ICU admission)
- Preferably to be given with steroids
- No active TB, fungal, systemic bacterial infection
- Long term follow up for secondary infections (such as reactivation of TB, Flaring of Herpes etc.)
- Significantly raised inflammatory markers (CRP and/or IL-6)
- Recommended single dose: 4 to 6 mg/kg (400 mg in 60 kg adult) in 100 ml NS over 1 hour



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