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

22nd April 2021

COVID-19 patient

Mild disease

Upper respiratory tract symptoms (&/or fever) WITHOUT shortness of breath or hypoxia

Home Isolation & Care

MUST DOs

- ✓ Physical distancing, indoor mask use, strict hand hygiene.
- ✓ Symptomatic management (hydration, anti-pyretics, anti-tussive, multivitamins).
- ✓ 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
- 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

- ➢ Tab Ivermectin (200 mcg/kg once a day for 3 days). Avoid in pregnant and lactating women.

  OR
- ➢ Tab HCQ (400 mg BD for 1 day f/b 400 mg OD for 4 days) unless contraindicated.
- ❖ 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
- ✓ DM (Diabetes mellitus) and other immunocompromised states
- ✓ Chronic lung/kidney/liver disease
- ✓ Cerebrovascular disease
- ✓ Obesity

Moderate disease

Any one of:
1. Respiratory rate ≥ 24/min, breathlessness
2. SpO2: 90% to ≤ 93% on room air

ADMIT IN WARD

Oxygen Support:

- ➢ Target SpO_2: 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.

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: Work of breathing, Hemodynamic instability, Change in oxygen requirement.
- ➢ Serial CXR; HRCT chest to be done ONLY If there is worsening.
- ➢ Lab monitoring: CRP and D-dimer 48 to 72 hrly; CBC, KFT, LFT 24 to 48 hrly; IL-6 levels to be done if deteriorating (subject to availability).

Severe disease

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

ADMIT IN 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 conventional ARDSnet protocol for ventilatory management.

Anti-inflammatory or immunomodulatory therapy

- Inj Methylprednisolone 1 to 2mg/kg IV in 2 divided doses (or an equivalent dose of dexamethasone) usually for a duration 5 to 10 days.

Anticoagulation

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

Supportive measures

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

Monitoring

- Serial CXR; HRCT chest to be done ONLY if there is worsening.
- Lab monitoring: CRP and D-dimer 24-48 hourly; CBC, KFT, LFT daily; IL-6 to be done if deteriorating (subject to availability).

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
  - Moderate to severe disease (requiring SUPPLEMENTAL OXYGEN), AND
  - No renal or hepatic dysfunction (eGFR <30 ml/min/m2; AST/ALT >5 times ULN (Not an absolute contradiction), AND
  - Who are within 10 days of onset of symptom/s.
    - ❖ Recommended dose: 200 mg IV on day 1 f/b 100 mg IV OD for next 4 days.
  - Not to be used in patients who are NOT on oxygen support or in home settings
- ➢ Tocilizumab (Off-label) may be considered when ALL OF THE BELOW CRITERIA ARE MET
  - Presence of severe disease (preferably within 24 to 48 hours of onset of severe disease/ICU admission).
  - Significantly raised inflammatory markers (CRP &/or IL-6).
  - Not improving despite use of steroids.
  - No active bacterial/fungal/tubercular infection.
    - ❖ Recommended single dose: 4 to 6 mg/kg (400 mg in 60kg adult) in 100 ml NS over 1 hour.
- ➢ Convalescent plasma (Off label) may be considered ONLY WHEN FOLLOWING CRITERIA ARE MET
  - Early moderate disease (preferably within 7 days of symptom onset, no use after 7 days).
  - Availability of high titre donor plasma (Signal to cut-off ratio (S/O) ≥3.5 or equivalent depending on the test kit being used).

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