AIIMS, New Delhi

CLINICAL GUIDANCE FOR MANAGEMENT OF COVID-19 (Version 2.1)

3rd May 2021

COVID-19 patient

Mild disease

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

Home Isolation

- ✓ Contact & droplet precautions, strict hand hygiene
- ✓ Symptomatic management (hydration, anti-pyretics, anti-tussive)
- ✓ Stay in contact with treating physician

- Seek immediate medical attention if:
  - ❖ Difficulty in breathing/ RR ≥ 24 /min/ SpO2 < 94%
  - ❖ High grade fever/severe cough particularly beyond 5 days of symptoms onset
  - ❖ A low threshold to be kept for those with any of the high-risk features*

- ➢ Tab Ivermectin (200 mcg/kg once a day for 3 to 5 days) to be considered (Avoid in pregnant/ lactating)
- ➢ If fever is not controlled with a maximum dose of Tab. Paracetamol 650 mg QID, may consider use of NSAID like Tab. Naproxen 250 mg BD
- ➢ Inhalational Budesonide (given via DPI/MDI with Spacer at a dose of 800 mcg BD for 5 to 7 days) to be given if symptoms (fever and/or cough) are persistent beyond 5 days of disease onset
- ➢ Systemic Steroids NOT indicated in mild disease; HOWEVER, may be considered in cases with high grade fever and worsening cough beyond 7 days ONLY in consultation with the treating physician for a duration of 3-5 days.

  Tab Dexamethasone 0.1-0.2 mg/kg OD
  OR
  Tab Methylprednisolone 0.5-1 mg/kg in 2 divided doses

*High-risk for severe disease or mortality

- ✓ Age > 60 years
- ✓ Cardiovascular disease including hypertension and CAD
- ✓ Diabetes mellitus and other immunocompromised states
- ✓ Chronic lung/kidney/liver disease
- ✓ Cerebrovascular disease
- ✓ Obesity

Moderate disease

Any one of:
1. Respiratory rate ≥ 24 /min
2. SpO2 ≤ 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 should be encouraged in all patients who are requiring supplemental oxygen therapy (sequential position changes every 1-2 hours)

Anti-inflammatory or immunomodulatory therapy
- ➢ Inj. Methylprednisolone 0.5 to 1 mg/kg in 2 divided doses (or an equivalent dose of dexamethasone – 0.1 to 0.2 mg/kg per day) 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 UFH or LMWH (weight based e.g., enoxaparin 0.5mg/kg per day SC OD)

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 every 48 to 72 hrly; CBC KFT, LFT every 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
2. SpO2 < 90% on room air

Admit in ICU

Respiratory support
- Consider use of NIV (Helmet or face mask interface depending on availability)/HFNC in patients with increasing oxygen requirement, if work of breathing is LOW
- 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 – 0.2 to 0.4 mg/kg per day) usually for a duration 5 to 10 days

Anticoagulation
- Weight based intermediate dose prophylactic UFH or LMWH (e.g., Enoxaparin 0.5mg/kg per dose SC BD)

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 deteriorating
- 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 (i.e., requiring SUPPLEMENTAL OXYGEN), AND
  - Who are within 10 days of symptom onset, with
  - No renal or hepatic dysfunction (eGFR <30 ml/min/m2; AST/ALT >5 times ULN (Not an absolute contradiction), AND
  - Recommended dose is 200 mg IV on day 1 f/b 100 mg IV OD for next 4 days
- ➢ 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
  - The recommended dose is 4 to 6 mg/kg (usually a dose of 400 mg in a typical 60kg adult) in 100 ml NS over 1 hour (single dose)
- ➢ Convalescent plasma (Off label) may be considered when following criteria are met
  - Early moderate disease (Preferably within 7 days of symptom onset)
  - Availability of high titre donor plasma (Signal to cutoff ratio ≥3.5 or equivalent depending on the kit being used)
  - Usual dose is 200 ml given over a period of 2 or more hours

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