AIIMS, New Delhi

INTERIM CLINICAL GUIDANCE FOR MANAGEMENT OF COVID-19 (Version 1.5)

8th September 2020

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
- ✓ HCQ may be considered in patients with high-risk factors of severe disease* (an ECG should be done prior to its use in patients with underlying CVD)

- **When to seek admission:**
  - Difficulty in breathing
  - Severe cough
  - As advised by treating medical officer
  - Oxygen saturation should be monitored at home

*A low threshold should be kept for those with any of the high-risk features

Moderate disease

Any one of:

1. Respiratory rate ≥ 24 /min
2. SpO2 < 94% 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 may be used in those with persistent hypoxia despite use of high-flow oxygen (sequential position changes every 1-2 hours)

Antiviral therapy

- Inj Remdesivir 200 mg Iv on day 1 f/b 100 mg IV daily for 5 days
  - OR
- HCQ 400 mg BD for 1-day f/b 400 mg OD for next 4 days
- Convalescent plasma may be considered on case to case basis

Anti-inflammatory or immunomodulatory therapy

- Inj Methylprednisolone 0.5 to 1 mg/kg (or equivalent dose of dexamethasone) IV in two divided doses for 5 to 10 days

Anticoagulation

- Prophylactic dose of UFH or LMWH## (weight based e.g., enoxaparin 0.5mg/kg per day SC)

Monitoring

- Monitor clinically for:
  - Work of breathing
  - Hemodynamic instability
  - Change in oxygen requirement
- Follow CRP, D-dimer, Trop I, coagulation parameters & Ferritin every 72 hourly (if available); CBC w/diff & KFT/LFT daily

Severe disease

Any one of:

1. Respiratory rate ≥ 30 /min
2. SpO2 < 90% on room air

ADMIT IN ICU

Respiratory support

- Consider use of HFNC in patients with increasing oxygen requirement if work of breathing is LOW
- A cautious trial of NIV with helmet interface (if available otherwise face mask interface)/CPAP with oro-nasal mask
- Intubation should be prioritized in patients with high work of breathing /if NIV is not tolerated ^^
- Use conventional ARDSnet protocol for ventilatory management

Antiviral therapy

- Antiviral agents are less likely to be beneficial at this stage; use of Remdesivir to be decided on case to case basis

Anti-inflammatory or immunomodulatory therapy

- Inj Methylprednisolone 1 to 2mg/kg in 2 divided doses for 5 to 10 days (or equivalent dose of dexamethasone)
- Tocilizumab may be considered on a case to case basis after shared decision making

Anticoagulation

- Consider high-dose prophylactic UFH or LMWH (e.g., Enoxaparin 40 mg or 0.5mg/kg BD SC), if not at 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 AIIMS antibiogram
- Use sedation and nutrition therapy as per existing guidelines

After clinical Improvement discharge as per revised discharge criteria

***High-risk for severe disease**

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

^^Higher chances of NIV failure

LMWH: Low Molecular Weight Heparin: if no contraindication or high risk of bleeding; UFH: Unfractionated heparin

Use validated score for assessing bleeding risk (e.g., HAS-BLED score)

Use D-dimer and SIC score for further risk stratification (SIC score ≥4 portends high thrombotic risk)

Follow AHA/ESC and ISTH guidelines in case patient is on antiplatelet agents

EUA/ Off label therapies (use based on limited available evidence):

- Remdesivir (EUA) to be considered in
  - Moderate to severe disease (requiring oxygen)
  - Rule out renal or hepatic dysfunction (eGFR <30 ml/min/m^2; AST/ALT >5 times ULN)

  Not to be combined with HCQ
- Tocilizumab (Off-label) may be considered in when all the below criteria are met:
  - Moderate to Severe disease
  - Significantly raised inflammatory markers (CRP &/or IL-6)
  - Not improving despite use of steroids
  - Rule out active bacterial infections

  The recommended dose is 4 to 8mg/kg (with a maximum dose of 800 mg at one time) in 100 ml NS over 1 hour (dose can be repeated once after 12 to 24 hours, if needed)
- Convalescent plasma (Off-label) may be considered when following are met:
  - Early moderate disease
  - Increasing oxygen requirement

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