COVID-19 Management Protocol
SGPGIMS, Lucknow

Ver 1.6 **April 1 2021**

COVID Positive Patient

Categorize based on Severity of Illness

Asymptomatic OR very mild disease
Fever, Mild URTI, No dyspnoea

- Home Isolation
- Contact and Droplet precautions
- Strict hand hygiene
- Tab Ivermectin 200mcg/kg OD x 3day s plus Tab Azithromycin 500mg OD and Tab Doxycycline 100 mg BD x 7 days
- Tab Zinc 50 mg BD
- Tab Vit C 500mg BD
- Symptomatic treatment for cough and fever (bronchodilators, mucolytic, paracetamol)
- Monitor closely for warning signs: Chest pain, dyspnoea, tachypnoea, cyanosis, altered mentation

Persistent fever, and cough, constitutional symptoms, uncontrolled comorbid conditions /risk factors for severe disease

- Admit in Isolation Ward
- Contact and Droplet precautions
- Strict hand hygiene
- Tab Ivermectin 200mcg/kg OD x 3day s plus Tab Azithromycin 500mg OD and Tab Doxycycline 100 mg BD x 7 days
- Prophylactic dose of UFH[2] or LMWH[2] (e.g., enoxaparin 40 mg per day SC)
- Tab Zinc 50 mg BD
- Tab Vit C 500mg BD
- Symptomatic treatment for cough and fever (bronchodilators, mucolytic, paracetamol)
- **Obtain baseline CBC, LFT/RFT, CRP, D-dimer & Ferritin, Fibrinogen, Procalcitonin**
- **Obtain HRCT Thorax**
- Monitor closely for warning signs
  - Chest pain, dyspnoea, tachypnoea, cyanosis, altered mentation

Ferritin > 500 mg/dl
CRP > 50 mg/dl
D-dimers > 2 times ULN
Fibrinogen > 500 mg/dl

OR **CT SEVERITY SCORE [4] > 20** →

- **Inj. Remdesevir 200 mg IV on Day 1 followed by 100mg OD for 4 days**
- **Prophylactic dose of UFH[2] or LMWH[2] (e.g., enoxaparin 40 mg per day SC)**

Moderate
Pneumonia with no signs of severe disease
RR ≥ 24/ min, SPO2 ≤ 94 % on Room Air

- Admit in ICU/HDU, oxygen support through nasal cannulae or high flow delivery systems if needed
- Target SpO2: 92-96% (88-92% in COPD).
- Awake proning should be given to all who tolerate it.
- All patients should have daily 12-lead ECG
- Follow CRP, D-dimer & Ferritin, Fibrinogen, Procalcitonin every 48-72 hourly; CBC, KFT/LFT daily
- Inj. Remdesevir 200 mg IV on Day 1 followed by 100mg OD for 4 days.
- Convalescent plasma in early moderate disease
- Consider IV methylprednisolone 0.5 - 1 mg/kg or dexamethasone 0.1- 0.2 mg/kg for 7 - 10 days (within 48 hours of admission or if oxygen requirement is increasing and if inflammatory markers are increased)
- Prophylactic dose of UFH[2] or LMWH[2] (e.g., enoxaparin 40 mg per day SC)
- Inj. Thiamine 100 mg IV OD, Inj. Vit C 1.5gm IV 6 hrly
- Antibiotics if suspecting infection according to local policy and control of co-morbid condition.
- **Monitor for: Increased WOB, Hemodynamic instability , Increase in oxygen requirement**

Severe
Respiratory distress requiring assisted ventilation
RR ≥ 30/min, SPO2 ≤ 90% on Room Air

- Cautious trial of CPAP/NIV, HFNC to prevent intubation
- Inj. Remdesevir 200 mg IV on Day 1 followed by 100mg OD for 4 days
- IV methylprednisolone 1.0 to 2 mg/kg or dexamethasone 0.1- 0.2 mg/kg for 7 - 10 days if not already given (To be tapered over 2 - 4 weeks depending on radiological involvement and clinical recovery)
- Therapeutic dose of UFH or LMWH (after excluding coagulopathy or thrombocytopenia or high risk of bleeding[3]
- Inj. Thiamine 100 mg IV OD, Inj. Vit C 1.5gm IV 6 hourly
- Monitor inflammatory markers daily
- ** Inj. Tocilizumab or Methylprednisolone pulse for Mx of Cytokine storm and ARDS (Off Label, Individualise))
- Mechanical ventilation if unable to maintain saturation, increased work of breathing or development of hemodynamic instability
  - Conventional ARDS Net strategy
  - Proning, recruitment manoeuvres
- Management of septic shock as per SSC guidelines and local antibiotic policy
- Convalescent Plasma as rescue therapy or on compassionate grounds.

Testing
While attending suspect case as per above protocol based on clinical assessment, testing shall be resorted to and if negative—manage in Non-Covid facility according to clinical diagnosis

Discharge
After clinical improvement, discharge according to state discharge policy

1. High risk patients for Severe Disease
   - Age > 60 years
   - HTN, Diabetets Mellitus and other immunocompromising conditions.
   - Chronic lung, kidney or liver disease
   - Cerebrovascular disease
   - Obesity BMI > 25 kg/m^2
2. LMWH: Low Molecular Weight Heparin: if no contraindication or high risk of bleeding: UFH: Unfractionated Heparin
3. Risk of Bleeding: Use validated score for assessing bleeding risk (e.g. HAS-BLED Score), Use D-Dimer and SIC for further risk stratification (SIC score ≥ 24 portends high thrombotic risk)
4. Yang et al. CT Severity Score: An Imaging Tool for Assessing Severe COVID-19. Radiology: Cardiothoracic Imaging. Published Online: Mar 30 2020

**** Informed consent mandatory before use of off label drugs.**

Source: MoHFW/ICMR