



COVID-19 Management Protocol SGPGIMS, Lucknow

Ver 1.4

Sep. 1 2020

COVID Positive Patient

Categorize based on Severity of Illness

Asymptomatic OR very mild disease Fever, Mild URTI, No dyspnoea	Persistent fever, and cough, constitutional symptoms, uncontrolled comorbid conditions /risk factors for severe disease	Moderate Pneumonia with no signs of severe disease RR ≥ 24/ min, SPO2 ≤ 94 % on Room Air	Severe Respiratory distress requiring assisted ventilation RR ≥ 30/min, SPO2 ≤ 90% on Room Air
<ul style="list-style-type: none"> Home Isolation Contact and Droplet precautions Strict hand hygiene For patients with high risk of severe disease¹. Tab. Hydroxychloroquine (400mg) BD on 1st day followed by 200mg 1 BD for 4 days OR Tab Ivermectin 12mg OD x 3day s with Tab Doxycycline 100 mg BD x 5 days OR Tab. Favipirivir 1800mg BD on Day 1, followed by 800mg BD x 13 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 	<ul style="list-style-type: none"> Admit in Isolation Ward Contact and Droplet precautions Strict hand hygiene Tab. Hydroxychloroquine (400mg) BD on 1st day followed by 200mg 1 BD for 4 days for patients with high risk of severe disease¹. (after ECG Assessment) with Tab Azithromycin 500 mg OD x 5 days OR Tab Ivermectin 12mg OD x 3day s with Tab Doxycycline 100 mg BD x 5 days OR Tab. Favipirivir 1800mg BD on Day 1, followed by 800mg BD x 13 days 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 <ul style="list-style-type: none"> Chest pain, dyspnoea, tachypnoea, cyanosis, altered mentation 	<ul style="list-style-type: none"> 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. Remdesivir 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 UFH² or LMWH² (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 	<ul style="list-style-type: none"> Cautious trial of CPAP/NIV, HFNC to avoid intubation Inj. Remdesivir 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 bleeding³) 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 <ul style="list-style-type: none"> Conventional ARDS Net strategy <ul style="list-style-type: none"> Prone, recruitment manoeuvres Management of septic shock as per SSC guidelines and local antibiotic policy Convalescent Plasma as rescue therapy or on compassionate grounds.
<p>Ferritin > 500 mg/dl CRP > 50 mg/dl D-dimers > 2 times ULN Fibrinogen > 500 mg/dl</p>		<p>OR CT SEVERITY SCORE ⁴ > 20</p>	<ul style="list-style-type: none"> Inj. Remdesivir 200 mg IV on Day 1 followed by 100mg OD for 4 days Prophylactic dose of UFH² or LMWH² (e.g., enoxaparin 40 mg per day SC)

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

- 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/m²

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