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Clinical Guidance for Management of **Adult COVID-19 Patients**

Treatment for Mild COVID-19 Cases (1/3)

Identification

Patients having upper respiratory tract symptoms (and/or fever)
WITHOUT shortness of breath or hypoxia

Recommendation

Home Isolation and Care

MUST DOs:

- Physical distancing, indoor mask use, strict hand hygiene
- Symptomatic management
(hydration, anti-pyretics, antitussive, multivitamins)
- Stay in contact with a treating physician
- Monitor temperature & oxygen saturation
(by applying a SpO2 probe to fingers)



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Clinical Guidance for Management of **Adult COVID-19 Patients**

Treatment for Mild COVID-19 Cases (2/3)

Seek immediate medical attention if:

- Difficulty in breathing
- High grade fever/severe cough, particularly lasting over 5 days
- A low threshold to be kept for those with any of the following high-risk features:
 - Age above 60 years
 - Cardiovascular disease, hypertension, & CAD
 - DM (Diabetes mellitus) & other immunocompromised states
 - Chronic lung/kidney/liver disease
 - Cerebrovascular disease
 - Obesity



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Treatment for Mild COVID-19 Cases (3/3)

MAY DOs:

Therapies based on low certainty of evidence

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

OR

- Tab HCQ (400 mg twice on the first day followed by 400 mg once in a day for 4 days) unless contraindicated
- Inhalational Budesonide (given via Metered dose inhaler/Dry powder inhaler) at a dose of 800 mcg twice a day for 5 days) to be given if symptoms persist beyond 5 days



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Clinical Guidance for Management of **Adult COVID-19 Patients**

Treatment for Moderate COVID-19 Cases (1/3)

Identification

Patient's respiratory rate is more than 24/min, breathlessness OR SpO₂ is 90% to < 93% on room air

Recommendation

Admit in Ward

Oxygen Support:

- Target SpO₂: 92-96% (88-92% in patients with Chronic obstructive pulmonary disease)
- Preferred devices for oxygenation: non-rebreathing face mask
- Awake proning encouraged in all patients requiring supplemental oxygen therapy (sequential position changes every 2 hours)



Clinical Guidance for Management of **Adult COVID-19 Patients**

Treatment for Moderate COVID-19 Cases (2/3)

Anti-inflammatory or immunomodulatory therapy

- Injection Methylprednisolone 0.5 to 1 mg/kg in 2 doses (or an equivalent dose of dexamethasone) for 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



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Treatment for Moderate COVID-19 Cases (3/3)

Monitoring

- Clinical Monitoring: Work of breathing, hemodynamic instability, change in oxygen requirement
- Serial Chest X-Ray; High Resolution CT Scan chest to be done ONLY if there is worsening
- Lab monitoring: CRP and D-dimer 48 to 72 hourly; CBC, KFT, LFT 24 to 48 hourly; IL-6 levels to be done if deteriorating (subject to availability)



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Clinical Guidance for Management of **Adult COVID-19 Patients**

Treatment for Severe COVID-19 Cases (1/3)

Identification

Patient's respiratory rate more than 30/min, breathlessness OR SpO₂ < 90% on room air

Recommendation

Admit in ICU

Respiratory

- Consider use of NIV* (Helmet or face mask interface depending on availability) in patients with increasing oxygen
- Consider use of High Flow Nasal Cannula (HFNC) in patients with increasing oxygen requirement
- Intubation should be prioritised in patients with high work of breathing /if NIV is not tolerated
- Use conventional ARDSnet protocol for ventilator management

*Non-Invasive Ventilation



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Clinical Guidance for Management of **Adult COVID-19 Patients**

Treatment for Severe COVID-19 Cases (2/3)

Anti-inflammatory or immunomodulatory therapy

- Injection Methylprednisolone 1 to 2mg/kg IV in 2 doses (or an equivalent dose of dexamethasone) for 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 twice a day)
 - There should be no contraindication or high risk of bleeding



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Treatment for Severe COVID-19 Cases (3/3)

Supportive measures

- Injection Methylprednisolone 1 to 2mg/kg IV in 2 doses (or an equivalent dose of dexamethasone) for 5 to 10 days
- Injection Methylprednisolone 1 to 2mg/kg IV in 2 doses (or an equivalent dose of dexamethasone) for 5 to 10 days

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)



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Clinical Guidance for Management of **Adult COVID-19 Patients**

Emergency Use Authorization/Off Label Use (1/3)

(based on limited available evidence & 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 followed by 100 mg IV once a day for next 4 days
- Not to be used in patients who are NOT on oxygen support or in home settings



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Emergency Use Authorization/Off Label Use (2/3)

(based on limited available evidence & only in specific circumstances)

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
- Not to be used in patients who are NOT on oxygen support or in home settings



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Emergency Use Authorization/Off Label Use (3/3)

(based on limited available evidence & only in specific circumstances)

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)