MANAGEMENT OF ADULTS WITH MODERATE TO SEVERE COVID-19

NATIONAL COVID-19 CLINICAL EVIDENCE TASKFORCE

VERSION 8.0
PUBLISHED
9 JULY 2020

Setting of care

ADMISSIONS

Manage people with likely or confirmed COVID-19 out of hospital where possible. **PP** [Taskforce]

Consider admission of people with likely or confirmed COVID-19 if they are haemodynamically unstable, hypoxaemic (SaO2 on room air ≤ 92%), have comorbidities, or an unsuitable home environment. **PP** [Taskforce]

MANAGING RISK OF INFECTION

00.07 As per the current national guidance on the use of personal protective equipment (PPE) in hospitals during the COVID-19 outbreak:

- follow contact and droplet precautions for routine patient care of people with suspected or confirmed COVID-19
- add contact and airborne precautions when aerosol-generating procedures are required.

PP [Taskforce/AHPPC]

Definition of disease severity

Moderate illness
Stable adult patient presenting with respiratory and/or systemic symptoms or signs. Able to maintain oxygen saturation above 92% (or above 90% for patients with chronic lung disease) with up to 4 L/min oxygen via nasal prongs.

Characteristics:

- prostration, severe asthenia, fever > 38° C or persistent cough
- clinical or radiological signs of lung involvement
- no clinical or laboratory indicators of clinical severity or respiratory impairment

Severe illness
Adult patients meeting any of the following criteria:

- respiratory rate ≥ 30 breaths/min
- oxygen saturation ≤ 92% at a rest state
- arterial partial pressure of oxygen (PaO2)/ inspired oxygen fraction (FiO2) ≤ 300

Testing and monitoring of inpatients

BASELINE TESTING AND DIAGNOSTIC WORK UP

00.01 In all people with suspected or confirmed COVID-19, perform haematology, biochemistry laboratory testing, a CXR and an ECG on admission. **PP** [Taskforce]

Investigate people with suspected or confirmed COVID-19 for influenza, CAP and other differential diagnoses as per usual practice. **PP** [Taskforce]

00.02 In cases of suspected COVID-19 that have not been confirmed by positive PCR, collect serum during the acute phase of the illness (preferably within the first 7 days of symptom onset); store and test the serum in parallel with convalescent sera collected 2 or more weeks after the onset of illness. **PP** [Taskforce/CDNA]

49.3 In cases where a strong clinical suspicion of COVID-19 remains after a negative SARS-CoV-2 PCR:

- continue isolation and treatment as for a provisional COVID-19 diagnosis;
- repeat SARS-CoV-2 PCR as soon as possible, adding a stool PCR if loose stool.

PP [Taskforce/ASID]

MONITORING AND MARKERS OF CLINICAL DETERIORATION

For people with COVID-19, monitor markers of clinical progression, such as rapidly progressive respiratory failure and sepsis, especially on days 5 to 10 after onset of symptoms. **CBR** [Taskforce]

00.03 In all people with suspected or confirmed COVID-19, perform ECG and haematology and biochemistry laboratory tests as clinically indicated to monitor for complications, such as acute liver injury, acute kidney injury, acute cardiac injury or shock. **PP** [Taskforce]

49.27 Only repeat CXR in people with suspected or confirmed COVID-19 if clinically indicated (e.g. in cases of clinical deterioration or recent intubation). **PP** [Taskforce/ASID]

00.04 Do not routinely perform CT scanning in people with suspected or confirmed COVID-19. **PP** [Taskforce]

Supportive care in hospital

GENERAL

44.77 In all people with suspected or confirmed COVID-19, anticipate complications such as arrhythmias, cardiac impairment, sepsis and multi-organ dysfunction, and address using existing standards of care. **PP** [Taskforce/ACEM]

Dexamethasone
Consider using dexamethasone 6 mg daily intravenous or oral for up to 10 days in **adults with COVID-19 who are receiving oxygen** (including mechanically ventilated patients). **EBR** [Taskforce]

Do not routinely use dexamethasone to treat **COVID-19 in adults who do not require oxygen**. **EBR** [Taskforce]

Dexamethasone or other corticosteroids may still be considered for other evidence-based indications in people who have COVID-19. **PP** [Taskforce]

Baloxavir marboxil
For people with COVID-19, only administer baloxavir marboxil in the context of randomised trials with appropriate ethical approval. **EBR** [Taskforce]

Favipiravir
For people with COVID-19, only administer favipiravir in the context of randomised trials with appropriate ethical approval. **EBR** [Taskforce]

Lopinavir/ritonavir
For people with COVID-19, only administer lopinavir/ritonavir in the context of randomised trials with appropriate ethical approval. **EBR** [Taskforce]

Remdesivir
Whenever possible remdesivir should be administered in the context of a randomised trial with appropriate ethical approval. Use of remdesivir for adults with moderate, severe or critical COVID-19 outside of a trial setting may be considered. **EBR** [Taskforce]

Ruxolitinib
For people with COVID-19, only administer ruxolitinib in the context of randomised trials with appropriate ethical approval. **EBR** [Taskforce]

Chloroquine
For people with COVID-19, only administer chloroquine in the context of randomised trials with appropriate ethical approval. **EBR** [Taskforce]

Hydroxychloroquine
For people with COVID-19, only administer hydroxychloroquine in the context of randomised trials with appropriate ethical approval. **EBR** [Taskforce]

Convalescent plasma
For people with COVID-19, only administer convalescent plasma in the context of randomised trials with appropriate ethical approval. **EBR** [Taskforce]

Interferon β-1a
For people with COVID-19, only administer interferon β-1a in the context of randomised trials with appropriate ethical approval. **EBR** [Taskforce]

Colchicine
For adults with COVID-19, only administer colchicine in the context of randomised trials with appropriate ethical approval. **EBR** [Taskforce]

Other disease-modifying treatments
For people with COVID-19, only administer disease-modifying treatments in the context of randomised trials with appropriate ethical approval. **CBR** [Taskforce]

SUPPORTIVE ANTI-INFECTIOUS THERAPY

49.7 In people with suspected or confirmed COVID-19 who are hypoxaemic (SaO2 on room air ≤ 92%) or have pleural effusion or purulent sputum, prescribe antibiotics according to local pneumonia guidelines.
If the onset of bacterial pneumonia symptoms occurs within 72 hours of hospital admission, choose antibiotics according to local CAP guidelines.
If the onset of bacterial pneumonia symptoms occurs more than 72 hours after admission, choose antibiotics according to local HAP guidelines. **PP** [Taskforce/ASID]

49.8 In people with suspected or confirmed COVID-19 with onset of symptoms < 48 hours, request an influenza PCR test.
If disease is severe, consider prescribing oseltamivir 75 mg BD (or a renally adjusted dose). If the influenza PCR is negative, cease oseltamivir. **PP** [Taskforce/ASID]

OTHER TREATMENTS

Use prophylactic doses of anticoagulants, preferably LMWH (e.g. enoxaparin 40 mg once daily or dalteparin 5000 IU once daily) in **adults with moderate COVID-19 or other indications**, unless there is a contraindication, such as risk for major bleeding. Where severe acute kidney disease is present, unfractionated heparin or renally adjusted doses of LMWH may be used (e.g. enoxaparin 20 mg once daily or dalteparin 2500 IU once daily). **CBR** [Taskforce]

Consider using increased prophylactic dosing of anticoagulants, preferably LMWH (e.g. enoxaparin 40 mg twice daily or dalteparin 5000 IU twice daily) in **adults with severe or critical COVID-19 or other indications**, unless there is a contraindication, such as risk for major bleeding or platelet count < 30 x 10^9/L. Where severe acute kidney disease is present (creatinine clearance < 30 mL/min), unfractionated heparin or renal adjusted doses of LMWH may be used (e.g. enoxaparin 40 mg once daily or dalteparin 5000 IU once daily). **CBR** [Taskforce]

1.13, 49.10 In all people with suspected or confirmed COVID-19, switch nebulisers to metered aerosols with spacers if possible. **PP** [Taskforce/ANZICS/ASID]

00.10 In people with suspected or confirmed COVID-19, consider alternative routes of administration for intranasal medicines, recognising that in some situations administration via the intranasal route may be a safer option for affected individuals and healthcare workers. **PP** [Taskforce/ACSQHC]

FLUID MANAGEMENT

1.9 In all patients with suspected or confirmed moderate to severe COVID-19, use a restrictive fluid management strategy, avoiding the use of 'maintenance' intravenous fluids, high volume enteral nutrition, and fluid bolus for hypotension. **PP** [Taskforce/ANZICS]

RESPIRATORY SUPPORT

49.4 In people with suspected or confirmed COVID-19 and a SaO2 ≤ 92% or significantly below baseline, initiate supplemental oxygen (1-4 L/min) via nasal prongs. **PP** [Taskforce/ASID]

Escalation of care

HOSPITALS WITH ICU

49.14 Urgently refer people with suspected or confirmed COVID-19 to intensive care if they are haemodynamically unstable, have rapidly worsening tachypnoea or hypoxaemia, or require ≥ 40% FiO2 to maintain SaO2 ≥ 92% (or acceptable saturations in those with lower baselines). **PP** [Taskforce/ASID]

For details of high level respiratory support see the **RESPIRATORY SUPPORT FOR SEVERE TO CRITICAL COVID-19** Clinical Flow Chart

HOSPITALS WITHOUT ICU

49.30 Consider the need for early transfer of people with suspected or confirmed COVID-19 to a higher-level facility with an ICU. **PP** [Taskforce/ASID]

49.31 When preparing for transfer of people with suspected or confirmed COVID-19, consider infection control implications, and whether intubation is required prior to transfer, as per local retrieval team policies. **PP** [Taskforce/ASID]

Discharge planning

53.01 People with suspected or confirmed COVID-19 who are clinically ready for hospital discharge but who have not had two consecutive swabs that are negative for SARS-CoV-02 by PCR should be discharged to home isolation until: 1) at least 10 days have passed since hospital discharge; and 2) there has been resolution of all symptoms of the acute illness for the previous 72 hours. **PP** [Taskforce/CDNA]

LEGEND

EBR: Evidence-Based Recommendation
CBR: Consensus-Based Recommendation
PP: Practice Point

Living Guidance | Currently prioritised for review | Not prioritised for review

Sources

ACEM – Australasian College for Emergency Medicine Clinical guidelines for the management of COVID-19 in Australasian emergency departments. V1.0, 26 March 2020

ACSQHC – Australian Commission on Safety and Quality in Health Care. COVID-19 Position Statement - Managing fever associated with COVID-19 (Revised 29 April 2020). Managing intranasal administration of medicines for patients during COVID-19 (Revised 19 May 2020)

AHPPC – Australian Health Protection Principal Committee (AHPPC). Guidance on the use of personal protective equipment (PPE) in hospitals during the COVID-19 outbreak, Updated 19 June 2020

ANZICS – The Australian and New Zealand Intensive Care Society (ANZICS) COVID-19 Guidelines. V1.0, 16 March 2020

ASID – Interim guidelines for the clinical management of COVID-19 in adults. Australasian Society for Infectious Diseases (ASID). V1.0, 20 March 2020

CDNA – Coronavirus Disease 2019 (COVID-19) Communicable Diseases Network Australia (CDNA) National Guidelines for Public Health Units. V3.4, 01 July 2020

Taskforce – Current guidance from the National COVID-19 Clinical Evidence Taskforce