MANAGEMENT OF ADULTS WITH SEVERE TO CRITICAL COVID-19

NATIONAL COVID-19 CLINICAL EVIDENCE TASKFORCE

LEGEND

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

Living guidance

Not prioritised for review

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Guiding principles of care

GENERAL

Increased-dose VTE prophylaxis — CONDITIONAL RECOMMENDATION AGAINST

Do not routinely offer therapeutic anticoagulant dosing in **adults with severe or critical COVID-19**. There is no additional indication for therapeutic dosing for anticoagulants in adults with severe or critical COVID-19 beyond current standard best practice. **EBR** [Taskforce]

MANAGING RISK OF INFECTION

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

- use eye protection
- use P2/N95 respirators
- use other PPE as per NHMRC IPC recommendations

PP [ICEG; NHMRC]

MONITORING AND MARKERS OF CLINICAL DETERIORATION

Monitoring — CONSENSUS RECOMMENDATION

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]

Definition of disease severity

Severe illness
A patient with signs of moderate disease who is deteriorating
OR
A patient meeting any of the following criteria:

- respiratory rate ≥30 breaths/min
- oxygen saturation <92% on room air at rest or requiring oxygen
- lung infiltrates >50%

Critical illness
A patient meeting any of the following criteria:

- respiratory failure (defined as any of)
  - severe respiratory failure (PaO_2/FiO_2 <200)
  - respiratory distress or acute respiratory distress syndrome (ARDS)
  - deteriorating despite non-invasive forms of respiratory support (i.e. non-invasive ventilation (NIV), or high-flow nasal oxygen (HFNO))
  - requiring mechanical ventilation
- hypotension or shock
- impairment of consciousness
- other organ failurerespiratory distress syndrome)

HIGH-LEVEL AND ADVANCED RESPIRATORY SUPPORT

Refer to **RESPIRATORY SUPPORT FOR SEVERE TO CRITICAL COVID-19** Clinical Flowchart

Treatments

DISEASE-MODIFYING TREATMENTS

Refer to the current Summary of DMTs for Adults
(Note: a **Summary for DMTs for Pregnant women** is under development).

These disease-modifying treatments should still be considered for other evidence-based indications in people who have COVID-19. **PP** [Taskforce]

Shock

ACUTE RESUSCITATION WITH FLUIDS

In adults with COVID-19 and shock, use dynamic parameters (skin temperature, capillary refilling time, and/or serum lactate measurement) rather than static parameters to assess fluid responsiveness. **PP** [Taskforce/SSC]

In all patients with severe to critical 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]

For the acute resuscitation of adults with COVID-19 and shock, use buffered/balanced crystalloids rather than unbalanced crystalloids. **PP** [Taskforce/SSC]

For the acute resuscitation of adults with COVID-19 and shock, do not use synthetic colloids.
PP [Taskforce/SSC]

USE OF VASOACTIVE AGENTS

In adults with COVID-19 and shock, use noradrenaline as the first-line vasoactive agent. If noradrenaline is not available, use either argipressin (vasopressin) or adrenaline as the first-line vasoactive agent. **PP** [Taskforce]

In adults with COVID-19 and shock, if a target mean arterial pressure (MAP) of 60-65 mmHg cannot be achieved by maximal doses of first-line monotherapy with a vasoactive agent, add a second vasoactive agent. **PP** [Taskforce]

Shock (cont.)

SUPPORTIVE THERAPY

In people who are critically ill, request an influenza PCR test and consider prescribing oseltamivir 75 mg BD (or a renally adjusted dose). If the influenza PCR is negative, cease oseltamivir.
PP [Taskforce/ASID]

Other Treatments

OESTROGEN CONTAINING THERAPIES

Stop oral menopausal hormone therapy (MHT) in women with severe or critical COVID-19.
Before restarting oral MHT, review the indication for this and consider transitioning to a transdermal preparation. **PP** [Taskforce]

In women who are receiving care in hospital for severe or critical COVID-19 and who are taking oestrogen-containing contraception, manage these medications as per usual care. **PP** [Taskforce]

In women who stop or suspend contraception when they have COVID-19, restart contraception at the time of discharge or when acute symptoms have resolved. **PP** [Taskforce]

Discharge planning

In patients with severe COVID-19 offer appropriate rehabilitation to optimise recovery, including early hospital rehabilitation. Plan transition of care to the community, including handover to general practice. **PP** [Taskforce]

Follow up care

- Assist people to connect to a GP if they do not have one.
- When the acute phase of the illness has resolved, and the patient is mobile, undertake a comprehensive review to assess their ongoing and rehabilitation needs.
- Review medications that were stopped or started.

PP [Taskforce]

Sources

ANZICS – The Australian and New Zealand Intensive Care Society (ANZICS) COVID-19 Guidelines. V3.0, 20 October 2020.

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

SSC – Surviving Sepsis Campaign: Guidelines on the Management of Critically Ill Adults with Coronavirus Disease 2019 (COVID-19)

ICEG – Guidance on the use of personal protective equipment (PPE) for health care workers in the context of COVID-19

National COVID-19 Clinical Evidence Taskforce – Australian guidelines for the clinical care of people with COVID-19.

NHRMC - Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019)