

COVID Treatments

DESCRIPTION

This guideline is to provide a most up to date evidence based treatments for the patient with suspected COVID-19. Due to the outbreak of COVID-19, all patients presenting acute respiratory symptoms especially respiratory failure, pneumonia and fever should be considered to be infected with COVID-19 until proven otherwise. This includes patients with known asthma and COPD.

To prevent spread of COVID -19 the following guidelines will be followed:

- 1) Nebulized medications should be avoided in all patients at this time due to risk to others.
- 2) A Cochrane review found that metered-dose inhalers with spacers are at least as effective, and likely more effective, than nebulized medications.
- 3) If Nebulized medications or meter dose inhalers are to be used, they must be used outside the ambulance and all providers must be in full PPE for airborne precautions.
- 4) No riders in the ambulance.

MEDICATIONS FOR BRONCHOCONSTRICTION IN THE COVID PATIENT

- 1) Terbutaline (1mg/ml)
 - a) **Adult:** 0.25 mg subcutaneously, PRN every 20 minutes for 3 doses.
 - b) **Pediatric:** 0.01 mg/kg subcutaneously (**MAX** 0.25 per dose), PRN every 20 minutes for 3 doses.
- 2) Epinephrine 1:1000
 - a) **Adult:** 0.3 (0.3 ml) IM every 20 minutes for 3 doses.
 - b) **Pediatric:** < 30 kg 0.15 (0.15 ml) mg IM, up to 0.3 mg, every 20 minutes for 3 doses.
> 30 kg 0.3 (0.3 ml) mg IM, up to 0.3 mg, every 20 minutes for 3 doses.
- 3) Magnesium Sulfate
 - a) **Adult:** 2 grams IV over 20 minutes.
 - b) **Pediatric:** 50 mg/kg up to 2 grams IV over 20 minutes.
- 4) Oxygen Therapy
 - a) Give supplemental oxygen therapy immediately to patients with severe acute respiratory infection and respiratory distress, hypoxemia or shock and target saturations > 88%.
 - b) In patients suspected of CoV19 infection, due to uncertainty around the potential for aerosolization, CPAP and BVM and aerosol generating procedures should be used with full personal precautions until COVID-19 infection has been ruled out.
 - c) There is strong evidence that the use of CPAP in the treatment of COVID-19 pneumonia is associated with a worse outcome. On this basis, WHO recommends, where possible, to avoid using CPAP and adopt instead perform early iGel intubation. The paramedic can consider intubating through the iGel if need.
- 5) Steroids
 - a) Neither the CDC nor the WHO has recommended steroid administration for viral pneumonia.
 - b) In general, steroid therapy does not appear to add any clinical outcome benefits in the treatment of COVID-19 infection. As well, steroid therapy may slow down clearance of the virus. The decision to use steroids in a patient during the COVID-19 outbreak should be based on patient individual presentation and best clinical judgement, if there is another indication for steroids such as COPD exacerbation. Generally, steroids should be avoided unless they are indicated for another reason such as exacerbation of asthma or COPD.

REFERENCES

- 1) Clinical management of severe acute respiratory infection (SARI) when COVID-19 disease is suspected: Interim guidance V 1.2. [https://www.who.int/publications-detail/clinical-management-of-severe-acute-respiratory-infection-when-novel-coronavirus-\(ncov\)-infection-is-suspected](https://www.who.int/publications-detail/clinical-management-of-severe-acute-respiratory-infection-when-novel-coronavirus-(ncov)-infection-is-suspected)
- 2) Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease (COVID-19) <https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html#minimize>

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- 3) Italy (2020-03-13) Guidelines for the treatment of people with COVID-19 disease Edition 2.0, 13 March 2020
<https://covid.idwiki.org/books/protocols/page/italy-%282020-03-13%29>
- 4) Consensus statement: Safe Airway Society principles of airway management and tracheal intubation specific to the COVID-19 adult patient group <https://www.mja.com.au/journal/2020/212/10/consensus-statement-safe-airway-society-principles-airway-management-and>