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Endorsed by IUH AHC Pediatric Infectious Diseases Physicians and Pediatric ID Pharmacy

Pediatric Inpatient Management for COVID-19 Positive Patients

There is no FDA approved treatment for COVID-19. Recommendations are based on in vitro and limited clinical data. ID consult required on all COVID-19 positive patients.

Mild Disease
- SpO_2 > 94% on room air
- COVID-19 PCR positive

Moderate Disease
- SpO_2 ≤ 94% on room air
- COVID-19 PCR positive

Severe Disease
- Hypoxia requiring >40% FIO2 or mechanical ventilation
- And/or hypotension requiring pressors

Labs:
Baseline (for all hospitalized COVID-19 PCR Positive Patients): CBC w/diff, CMP, CRP, Ferritin, D-dimer, LDH, Mg
Daily for subsequent 48 hours (for severe disease or if clinically indicated): CBC w/diff, CMP, CRP, Ferritin, D-dimer, LDH, Mg
Lab frequency thereafter determined by clinical course

Supportive care

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Dosing Recommendations

Remdesivir
< 40 kg 5 mg/kg IV x1 2.5 mg/kg IV q24h x9 doses
≥ 40 kg 200 mg IV x1 100 mg IV q24h x9 doses

Tocilizumab
< 30 kg: IV: 12 mg/kg/dose [max 800 mg] IV x1
≥ 30 kg: IV: 8 mg/kg/dose [max 800 mg] IV x1

If no clinical improvement after initial dose, may repeat dose x1 within 48h with ID approval.

NOTES:

Hydroxychloroquine: At present, hydroxychloroquine use is not recommended unless given in a clinical trial.
Steroids: Steroids should not be used for treatment of COVID-19. They can be given if needed for non-COVID-19 conditions for which they are required.
Neonates: There are no data to support treatment of neonates with COVID-19 with anything other than supportive care.

Age < 18 years

Screen for Eligibility to receive Remdesivir compassionate use

Inclusion:
- SARS-CoV2 confirmed by PCR
- Hospitalized w/ SaO2 < 94 % on RA or requiring O2
- Liver function tests (ALT) < 5x ULN

Exclusion criteria:
- Requiring significant vasopressor or inotropic support
- Requiring veno-arterial (VA) ECMO
- CrCl < 30 mL/min, HD, or CVVH

Investigational agents for COVID-19 must be discontinued prior to the initiation of remdesivir.
Remdesivir Daily Labs: CMP, CBC w/diff, PT, and urinalysis. COVID-19 PCR, should be performed at regular intervals to monitor response to remdesivir. Recommend to recheck on day 4 of treatment.

If in-eligible or inadequately responsive to remdesivir, screen for eligibility to receive convalescent plasma via compassionate use if:
- Severe ARDS (oxygenation Index > 16)
- Use of prophylactic anticoagulation (at a minimum) has been started
- PICU & ID concur that convalescent plasma treatment would be useful treatment in the patient

Consider tocilizumab on case-by-case basis

Tocilizumab treatment can be considered in patient with:
- Hypoxia requiring >40% FIO2 and/or hypotension requiring pressors
- Lab evidence of cytokine storm (2 or more of the following): Thrombocytopenia elevated and increasing ferritin, LDH, or D-dimer

Tocilizumab Labs: IL-6 at baseline and prior to 2nd dose (if indicated)

Age 18 years+

Screen for eligibility to receive convalescent plasma via expanded access if:
- Severe ARDS (Oxygenation Index > 16)
- Use of prophylactic anticoagulation (at a minimum) has been started
- PICU & ID concur that convalescent plasma treatment would be useful treatment in the patient