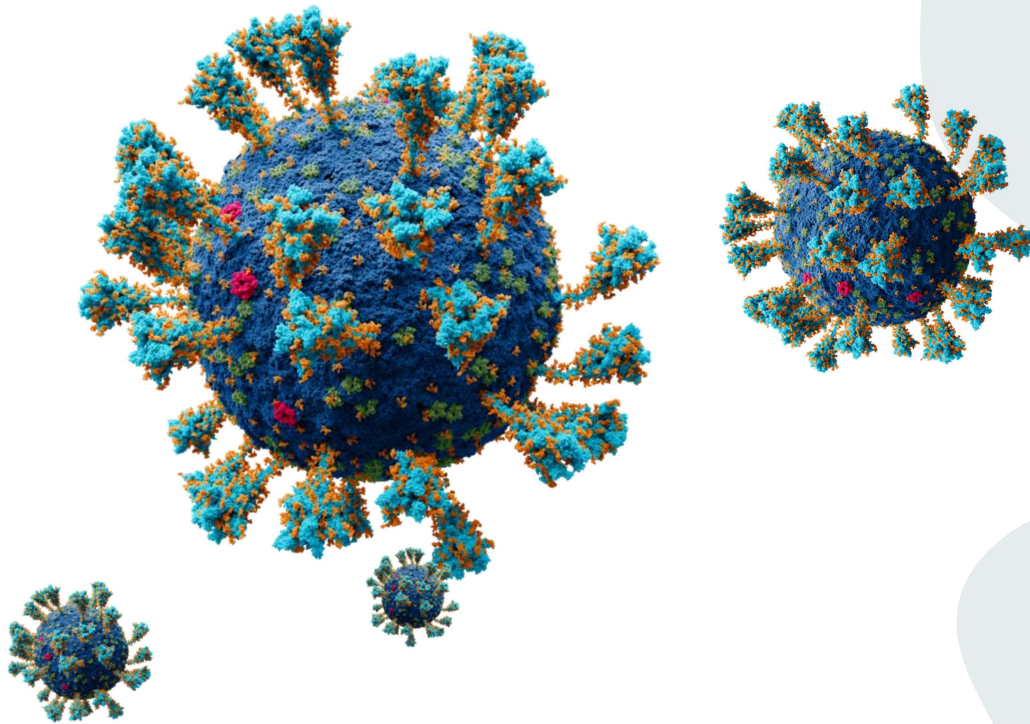


# COVID-19 Complications and Management



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*PIDST 21 May 2023, for Sinovac*

## A one-year-old girl presented with convulsion

- **Previously healthy**
- History of fever, coughing, rhinorrhea, poor intake, and vomiting for 1 day
- **10 hr PTA, developed convulsion**, then became drowsy
- 30 minutes PTA, developed another episode of convulsion
- No history of convulsion
- Vaccination: Up to date, except for COVID-19
- T **40 C** RR 24/min BP 89/54 mmHg HR 120/min
- GA: alert, active
- HEENT: **pharynx mild injected**, no conjunctivitis, not pale, no jaundice, no lymphadenopathy
- CVS: normal s1s2, capillary refill < 2 sec
- RS: clear equal breath sound
- Skin: no rash, no edema of extremities
- Abd: no distension, no hepatosplenomegaly
- Neuro: E4V5M6 alert oriented, motor power v/v all extremities

## HEMATOLOGY

Orderable Item	Value	Units	H/L	Ref Range	Perf. Lab
CBC					
Hemoglobin	12.6	g/dl		10.5-13.5	11
Hematocrit	38.7	%		33.0-39.0	11
<b>Rbc count</b>	<b>5.22</b>	<b>x 10<sup>6</sup>/ul</b>	<b>H</b>	<b>3.4-5.2</b>	<b>11</b>
MCV	74.1	fl		70.0-86.0	11
<b>MCH</b>	<b>24.1</b>	<b>pg</b>	<b>L</b>	<b>24.2-30.0</b>	<b>11</b>
MCHC	32.6	g/dl		30.0-36.0	11
Red cell distribution RDW	12.5	%		12.1-16.2	11
Wbc count	8.26	x 10 <sup>3</sup> /ul		6.0-17.0	11
NRC/ 100 WBC	0.0				11
Platelet count	267	x 10 <sup>3</sup> /ul		150-350	11
Absolute					
Absolute neutrophils	6.37	x 10 <sup>3</sup> /ul		1.5-8.5	11
<b>Absolute lymphocyte</b>	<b>1.23</b>	<b>x 10<sup>3</sup> /ul</b>	<b>L</b>	<b>4.0-13.5</b>	<b>11</b>
Absolute monocyte	0.59	x 10 <sup>3</sup> /ul		0.3-1.9	11
Absolute eosinophil	0.04	x 10 <sup>3</sup> /ul		0.0-0.2	11
Absolute basophil	0.03	x 10 <sup>3</sup> /ul		0.0-0.2	11
Wbc differential count					
<b>% Neutrophils</b>	<b>77.1</b>	<b>%</b>	<b>H</b>	<b>20.7-61.8</b>	<b>11</b>
<b>% Lymphocytes</b>	<b>14.9</b>	<b>%</b>	<b>L</b>	<b>19.8-63.7</b>	<b>11</b>
% Monocytes	7.1	%		3.3-18.1	11
% Eosinophils	0.5	%		0.0-3.1	11
% Basophils	0.4	%		0.0-1.1	11
%Atypical lymphocyte	-	%			11
%Blasts	-	%			11

## A previously healthy 1 yo. girl

### \*\*SARS-COV-2: Rapid PCR

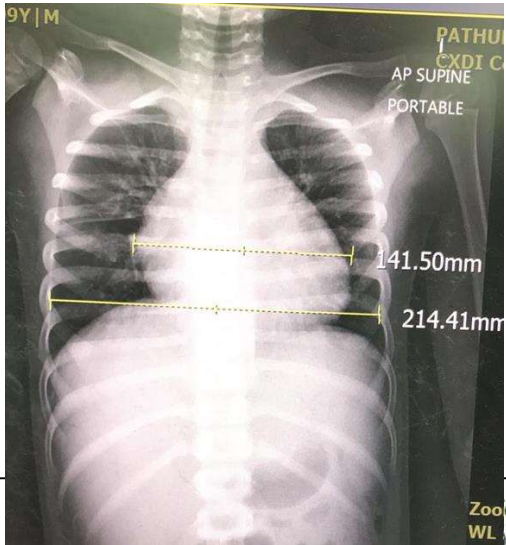
Orderable Item	Value	Units	H/L	Ref R
SPECIMEN				NP swab+throat swab
<b>**SARS-COV-2: Rapid PCR</b>	<b>Detected</b>			*

- Diagnosis: COVID-19 with febrile convulsion
- Treatment:
  - Remdesivir 5 mg/kg/day OD Day 1 then 2.5 mg/kg/day OD Day 2-3
  - Supportive treatment

# A healthy 9 yo. Boy with fever for 4 days

- 4 days PTA, developed fever, diarrhea, vomiting
- 2 days PTA, had painful cervical lymphadenopathy, received ceftriaxone, FNA revealed negative organism
- Upon admission, developed tachypnea, shock
- V/S: BT 38.3 °C, BP 89/42 mmHg, PR 120/min, RR 40/min, SpO2 100%
- GA: good consciousness, look fatigue, mildly pale, no jaundice, no pitting edema, capillary refill < 2 secs
- HEENT: **bilateral conjunctival injection with spare limbus**, strawberry tongue, no oral ulcer, **Rt. cervical mass 10 cm**, tender, warmth, firm consistency





Smear request	Completed
ESR	68
Hemoglobin	9.2
Hematocrit	25.9
Rbc count	3.28
MCV	79.0
MCH	28.0
MCHC	35.5
Red cell distribution RDW	13.3
Wbc count	6.73
NRC/ 100 WBC	0.0
Platelet count	203
Absolute neutrophils	5.14
% Neutrophils	ALC 922 76.4
% Lymphocytes	13.7
% Monocytes	1.8
% Eosinophils	8.0

	Today 10:13	Today 04:11	Today 03:31	Today 03:05
C-Reactive protein	165.69			
Triglyceride		200		191
**Ketone (Blood)			0.67	
**Procalcitonin (PCT)				13.10
BUN				8.5
Creatinine				0.57
Sodium (Na+)				136
Potassium (K+)				2.3
Chloride (Cl-)				107
Bicarbonate(HCO3-)				13
**Anion gap				16.0
Total protein				5.3
Albumin				2.4
Globulin				2.9
Total Bilirubin				0.49
Direct Bilirubin				0.30
AST (SGOT)				28
ALT (SGPT)				6
Alkaline (ALP)				93
Phosphorus				2.8
Magnesium				1.9
Measured pH				7.406
Measured Ca++				4.50
Corrected Ca++(pH7.4)				4.51
LDH				306
CK-MB Mass				1.62
Troponin - T hs				205.000
NT Pro BNP				23426

**Dx: MIS-C  
with SHOCK**

**\*\*SARS-CoV-2 (COVID-19)  
RNA: Inconclusive**

<b>**SARS-CoV-2 Ab IgM</b>	
	Today 05:47
<b>**SARS-CoV-2 Ab IgG</b>	
	Today 05:47
Result	Positive

**Dengue NS1Ag, IgM, IgG:  
negative**

<b>Interleukin-6 (IL-6)</b>	
	Today 08:13
Interleukin-6 (IL-6)	140.80

<b>COAGULATION</b>	
	Today 03:05
PT	14.3
APTT	31.0
Fibrinogen	494.8
D-dimer	4520.00