3-2022

Multisystem Inflammatory Syndrome in Children (MIS-C): Inpatient

Children's Mercy Kansas City

These guidelines do not establish a standard of care to be followed in every case. It is recognized that each case is different and those individuals involved in providing health care are expected to use their judgment in determining what is in the best interests of the patient based on the circumstances existing at the time. It is impossible to anticipate all possible situations that may exist and to prepare guidelines for each. Accordingly, these guidelines should guide care with the understanding that departures from them may be required at times.

Admit pt to Inpt Unit
(Follow "Initial Assessment" per *MIS-C Evaluation and Treatment* algorithm if pt admitted from outside facility)

Is MIS-C suspected from "Initial Assessment"?

No → Provide routine inpt management for diagnosis
OR
Discharge home with:
- PCP follow up in 24-48 hrs
AND
- Return to ED for fever ≥ 5 days and/or new signs/symptoms

Yes

Compensated shock: persistent tachycardia despite antipyretics, BP may be normal or have wide pulse pressure, intact peripheral perfusion or brisk cap refill
Hypotensive shock: tachycardia, hypotension and/or wide pulse pressure, delayed or flash peripheral perfusion

Does the pt have either compensated or hypotensive shock?

Yes → Suspect MIS-C with Compensated or Hypotensive Shock

Transfer to PICU
(DO NOT delay transfer while initiating following therapies):
- Initiate Sepsis Inpt PowerPlan
- Initiate MIS-C Inpt PowerPlan
- Administer 20 ml/kg NS bolus, reassess after each bolus to avoid fluid overload
- Obtain VBG, Tier 1 and Tier 2 labs, CXR, ECG, ECHO (urgent) if not already obtained
- Antibiotics per MIS-C Inpt PowerPlan (cefepime, vancomycin, doxycycline)
- Consult:
  - Infectious Diseases
  - Rheumatology
  - Cardiology
  - Coag: If Tier 2 labs abnormal OR clinical suspicion for MIS-C

Is pt stable for transfer to Medical Unit?

Yes → *Initiate MIS-C Inpt PowerPlan*

No → *Initiate MIS-C Inpt PowerPlan*

No → Suspect MIS-C without Shock

Initiate MIS-C Inpt PowerPlan

Labs:
- Draw Tier 1/Tier 2 labs per *MIS-C Evaluation and Treatment* algorithm if not already obtained

Diagnostic Studies:
- Obtain ECG, ECHO* (non-urgent)
  *consider PICU transfer if moderate or severe cardiac dysfunction on ECHO

Consult:
- Infectious Diseases
- Rheumatology
- Cardiology
- Coag: If Tier 2 labs abnormal OR clinical suspicion for MIS-C

Medications:
- PPI for GI Prophylaxis
- Fluid resuscitation as clinically indicated
- VTE Prophylaxis per COVID-19 VTE Prophylaxis Guidelines
- Additional treatment per consultant recommendations

Does pt meet discharge criteria?

No → *Initiate MIS-C Inpt PowerPlan*

Yes

Discharge Criteria:
- Minimum observation for 24 hours is recommended
- Hemodynamically stable ≥48 hours
- Improved or normal cardiac function
- Afebrile≥48 hours
- Down-trending inflammatory markers
- Improving or stable end organ involvement

Discharge pt after Outpt Follow-Up/Issues determined:
- Discuss need for Aspirin therapy at discharge with consulting teams
- Follow-up with PCP in 24-48 hours
- Follow-up with Rheumatology if pt received steroids, anakinra, immune modulation beyond IVIG, concern for MAS, or provider discretion
- Follow-up with Infectious Diseases if ongoing treatment for infection or treated with IVIG alone
- Follow-up with cardiology at 2 weeks and 6 weeks following discharge
- Follow-up with Coag if thrombus identified or pt continuing on prophylactic anticoagulation at the time of discharge
- Return to ED for fever ≥5 days and/or new signs/symptoms

Abbreviations (laboratory & radiology excluded):
pt = patient
MIS-C = Multisystem inflammatory syndrome in children
ED = Emergency Department
PICU = Pediatric Intensive Care Unit

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