



SAINT MARY-OF-THE-WOODS COLLEGE

Nursing Assessment for MIS-C

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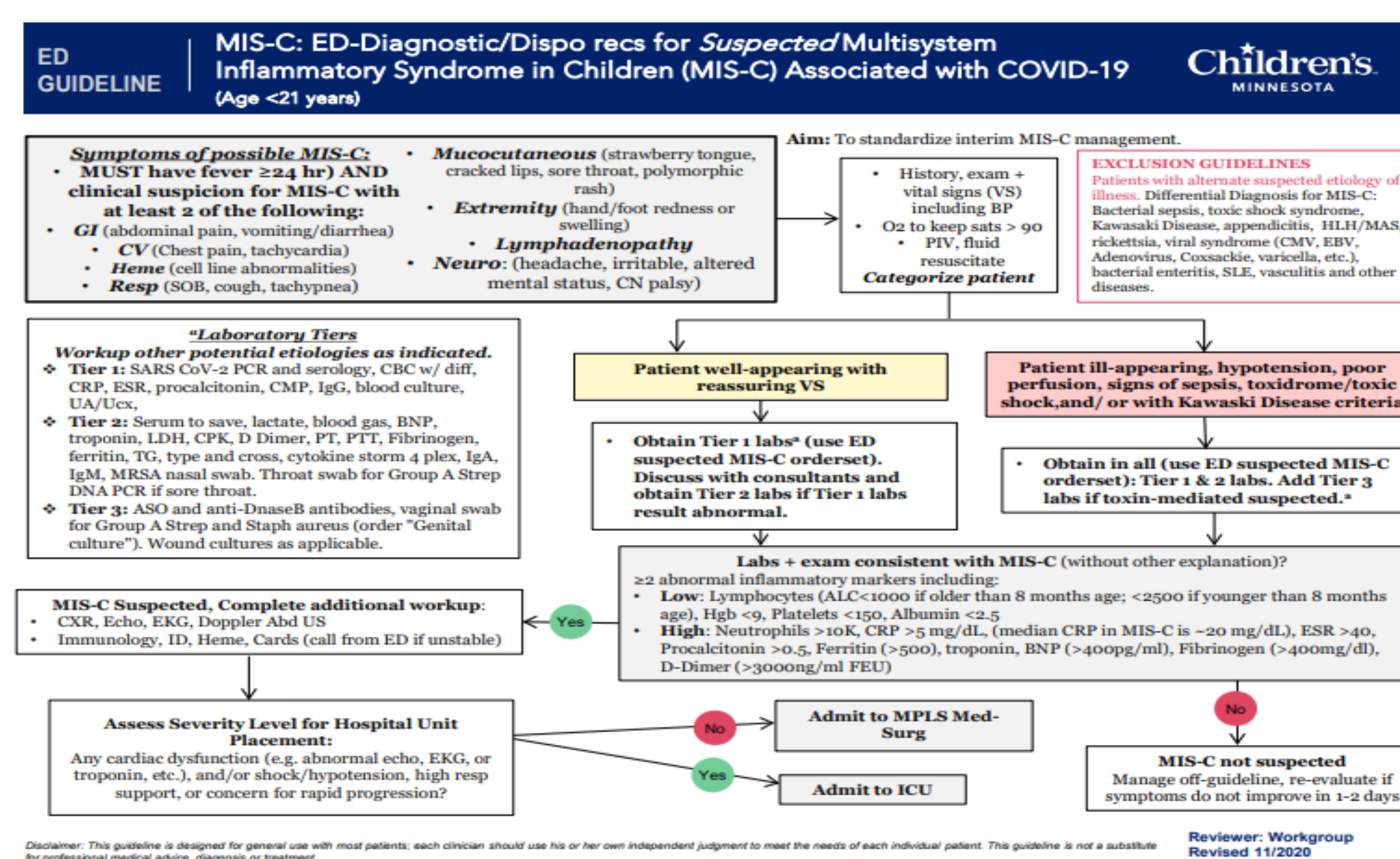
Introduction

- Purpose**
 - To provide pediatric bedside nurses with an assessment tool add-in for recognizing symptoms of Multisystem Inflammatory Syndrome in Children (MIS-C).
- Problem**
 - There is a rare incidence of cases throughout the world.
 - Pediatric patients are having a significantly lower mortality rate.
 - Pediatric nurses do not have enough practice when it comes to recognizing COVID-19 symptoms.
 - It is important to assess and recognize the symptoms because MIS-C "affects several organs and systems in the body." (Boston Children's Hospital, 2020).
 - The recognized symptoms in children differ from the symptoms experienced by the adult population.
 - There are overlapping diseases that present similarly to MIS-C
 - COVID-19
 - Kawasaki Disease
 - Toxic Shock

Materials and Methods

- MIS-C emergency department guidelines from Children's Minnesota
 - Lab Values
 - Vital Signs (VS)
- Evidence Based Practice
 - SMWC Database
 - CINHAL Database
 - Google Scholar
 - Keywords: COVID-19, MIS-C, multisystem inflammation, children, Kawasaki disease (KD), and pediatrics.

Fig. 2.



Results & Discussion

The nurse should be sure to monitor heart rate and respiratory rate throughout the assessment and beyond.	These rates need to be monitored due to the increased inflammation that is occurring throughout the patient's bodies. Along with the increased inflammation, in a study conducted in Paris, France, it was shown that 76% of the subjects had myocarditis which affects the heart (Toubiana et al., p.1, 2020).
The assessment should ensure that the nurses receive adequate education on MIS-C.	Multisystem Inflammatory Syndrome in Children (MIS-C) is a serious condition in which some parts of the body become inflamed such as the heart, blood vessels, kidneys, digestive system, brain, skin or eyes — become inflamed. (Ahmed et al., 2020)
The assessment should include signs and symptoms of MIS-C that should be identified during the assessment.	The clinical signs and symptoms of MIS-C will be the most help in identifying the disease. These include a persistent fever greater than 38.5 C for all cases, most have some sort of oxygen requirement, and hypotension. Finally, in some cases "abdominal pain, conjunctivitis, confusion, headache, mucous membrane changes, syncope, swollen hand and feet, and rash" (Royal College of Pediatrics and Child Health, 2020, p. 4).
The assessment tool should provide specific lab value ranges that the nurse needs to monitor for.	Labs and electrolyte values are crucial parts of information that can cause a change in a patient rapidly. Knowing what to expect with MIS-C will help create a better understanding of what nurses will see happen as a result of these values. Some important values include "Low lymphocytes, hemoglobin <9, platelets <150, albumin <2.5. High neutrophils, ESR, prolactin, troponin, fibrinogen, and D-dimer" (Children's Minnesota, 2020, p. 2).
The nurse should receive education about differentiating MIS-C from Kawasaki Disease and Toxic shock.	Kawasaki disease has three phases, one is fever higher than 102.2 F (39 C) and lasts more than three days, extremely red eyes without a thick discharge, a rash on the main part of the body and in the genital area, red, dry, cracked lips and an extremely red, swollen tongue, swollen, red skin on the palms of the hands and the soles of the feet, swollen lymph nodes in the neck and perhaps elsewhere, irritability. 2nd phase: the child may develop peeling of the skin on the hands and feet, joint pain, diarrhea, vomiting, abdominal pain. 3rd phase: signs and symptoms slowly go away unless complications develop. Toxic shock syndrome is a complication of bacterial infections. (Ahmed et al., 2020)
Nursing continuing education helps develop specialized knowledge and skills which improves nursing activity	In terms of MIS-C, children will receive better nursing care if nursing continually receive education regarding the signs, symptoms and treatment options. Continuing education has shown to improve patient outcomes (National Health Career Association).

Fig. 3.



Conclusions

- Education is an essential component for nurses regarding assessing for MIS-C.
- Understanding the desired nursing differential assessment for MIS-C will help nurses care for patients with COVID-19, Kawasaki Disease, and Toxic Shock Syndrome.
- Having a decision paradigm, at the Children's ER bedside, will help nurses navigate the steps needed in order to provide the most optimal care.
- Surely this will not be the last pandemic experienced. Therefore, it is paramount to utilize the novel virus as a learning tool and preparation tool for future pandemics/endemics.
- Assessing for the signs and symptoms of MIS-C is the best method for helping to diagnose and differentiate between MIS-C, Kawasaki Disease, and Toxic Shock.

Future Work

- Our recommendation based on the literature review, is to implement the nursing assessment tool for MIS-C to help nurses identify symptoms related to MIS-C.
- This assessment tool will be a checklist completed at bedside. The checklist will list the signs and symptoms of MIS-C and will be placed into the patient's health record.
- To ensure that this assessment tool is adequate, it will need to be implemented and used within a health care setting to determine if it has real-world efficacy.

Literature Cited

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