Child Health BC Pediatric Sepsis Clinical Care Algorithm

Sepsis is a MEDICAL EMERGENCY; Early Recognition and Treatment is Imperative for Survival

Provincial Health Services Authority

CHILD HEALTH BC
LEAD BENEFACTOR save on foods

0 MINUTES

RECOGNITION

- Looks sick or toxic
- Critical heart rate
- Fever greater than 38°C or less than 36°C
- Poor perfusion/purpura/petechiae
- Altered mental status: confusion, lethargy or irritability
- Identified risk factors
- PEWS score increased by 2 or more

Refer to: Provincial Pediatric Sepsis Guideline for detailed instructions for intervention and care

FIRST 5 MINUTES

IMMEDIATE ACTIONS

- Notify Most Responsible Practitioner
- Attach cardiorespiratory monitoring
- Initial assessment (HR, RR, BP, Temp, SpO2, Capillary Refill and LOC)
- Assess airway and administer oxygen to maintain saturations above 92%

Hypotension is a late and often terminal sign in pediatric septic shock

FIRST 60 MINUTES

ESTABLISH VASCULAR ACCESS, OBTAIN LAB WORK & ADMINISTER ANTIBIOTICS

- Secure IV/IO access
- Collect blood cultures (and ideally all applicable cultures)
- Measure lactate
- Administer antibiotics IV/IO. IM if delayed access (**do not delay** antibiotics administration in the unstable patient)

If intravenous (IV) access is not secured within 5 minutes or after two attempts, use intraosseous (IO) access. In situations where rapid IV access may be difficult, IO access should occur concurrently with IV attempts to minimize delay to vascular access

FLUID ADMINISTRATION

- Administer Sodium Chloride 0.9% 10-20 mL/kg over 5-30 minutes
- Reassess response
- Prevent and treat hypothermia
- Check for and correct low glucose
- Check for and correct low calcium

Excessive fluid resuscitation can be harmful. Continually monitor for signs of fluid overload (e.g. increased work of breathing, crackles on auscultation, hepatomegaly or signs of cardiogenic shock).

PICU/NICU consultation via PTN should occur if a total of more than 40mL/kg of fluid is required.

ONGOING CARE

- Reassess patient at a minimum of every 15 minutes (HR, RR, BP, Temp, SpO2, Capillary Refill and LOC)
- Administer dextrose containing maintenance fluids

MONITOR

IV ACCESS
LACTATE
BLOOD WORK
ANTIBIOTICS

FLUIDS

REASSESS

PEDIATRIC CONSULTATION:

Consult local Pediatrician on-call; or CHARLiE via Zoom or phone; or higher level of care center via PTN

CONSULT PICU/NICU VIA PTN FOR:

- Considerations of intubation and ventilation
- Selection and initiation of vasoactive medications
- Prior to steroid initiation
- Prior to administration of blood products

Adapted from Queensland Paediatric Sepsis Program, Children's Health Queensland Australia 2020 & Translating Emergency Knowledge for Kids 2018.

LIST OF ABBREVIATIONS

BP = Blood Pressure
CHARLiE = Child Health Advice in Real-time Electronically
HR = Heart Rate
IM= Intramuscular
IO = Interosseous
IV = Intravenous
LOC = Level of Consciousness
PICU = Pediatric Intensive Care Unit
PTN= Patient Transfer Network
RR = Respiratory Rate
Sp02 = Serum Pressure Oxygen

This document is a component of the CHBC Provincial Pediatric Sepsis Recognition and Management Guideline
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