Child Health BC Pediatric Sepsis Clinical Care Algorithm

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

O 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



60 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

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

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

Kids 2018.

PEDIATRIC CONSULTATION:



Consult local Pediatrician on-call; or if rural/remote 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

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 Sp02 = Serum Pressure Oxygen

PTN= Patient Transfer Network RR = Respiratory Rate

is document is a component of the CHBC Provincial Pediatric Sepsis Recognition and Management Guideline ective: June 2023

MONITOR

LACTATE BLOOD WORK ANTIBIOTICS

IV ACCESS

FLUIDS

REASSESS