

Paediatric sepsis- Summary Clinical Guideline UHDB

Reference No: Reference no.: CH CLIN G126

Recognition of sepsis should be based on:

- Systematic ABCDE approach with PEWS scoring.
- Being aware and acting on the possible signs and symptoms with good history taking.
- Parental Concerns and Health Professionals' gut feelings should be taken seriously and may require an escalation for management as sepsis. '**COULD THIS BE SEPSIS!**
- Use AoMRC clinical decision framework to support timely response for infection [Statement on the initial antimicrobial treatment of sepsis V2 1022.pdf \(aomrc.org.uk\)](#)

If concerned about sepsis or infection in a child

- Complete the [UK sepsis screening tool](#) checklist.

Treat promptly as **Sepsis 6** in any child likely to have an infection if:

- Child is very unwell.
- PEWS score ≥ 9 (unless another diagnosis is obvious e.g., acute severe viral wheeze or asthma)
- PEWS score is 5- 8 and/or significant parental concern.
- PEWS score is 5- 8 DO LACTATE - if > 4 mmol/l
(Lactate 2-4 mmol/l should prompt detailed clinical assessment and may require further investigations and antibiotic treatment).
- Children with risk factors for severe infection e.g., < 3 months with unexplained fever, Immunosuppressed, Post-op, or patients with indwelling devices

- **Normal PEWS doesn't exclude sepsis.**
- **Temperature does not contribute to the PEWS score.**
- PEWS scores for RR has higher thresholds than APLS and other previous observation scales (POPS), clinical decision should be guided by RR trend and clinical judgement.

TREATMENT:

- First-line antibiotic choice for a child with Sepsis will be guided by the source of infection.
- Sepsis with unidentified focus use IV ceftriaxone 1st line **unless clinically shocked** in which case IV cefotaxime should be used (as per BNFC)

Abbreviations:

PEWS-Paediatric early warning score ,POPS-Paediatric observation priority score, AoMRC-Academy of medical royal colleges.

SEPSIS SCREENING TOOL ACUTE ASSESSMENT - CHILD **AGE <16**

PATIENT DETAILS:

DATE:

TIME:

NAME:

DESIGNATION:

SIGNATURE:

01 START IF THE CHILD IS LIKELY TO HAVE AN INFECTION, AND EITHER YOU'RE WORRIED CLINICALLY OR PEWS HAS TRIGGERED

ADDITIONAL FACTORS PROMPTING SCREENING FOR SEPSIS INCLUDE:

- Parent or carer concern
- Age less than one year
- Known (or risk of) immunosuppression
- Recent surgery/ trauma or indwelling lines

YES

CALCULATE PEWS SCORE USING LATEST VITAL SIGNS & MEASURE LACTATE USING VBG/CAP IF AVAILABLE

02 IS PEWS 9 OR ABOVE?

OR IS PEWS BETWEEN 5 AND 8 AND LACTATE > 4 MMOL/L

OR DOES THE CHILD LOOK EXTREMELY UNWELL TO A HEALTH PROFESSIONAL?

NO

03 IS PEWS BETWEEN 5 AND 8?

OR IS THERE PERSISTING SIGNIFICANT PARENTAL CONCERN?

IF LACTATE > 4 MMOL/L ESCALATE TO RED FLAG SEPSIS

YES

RED FLAG SEPSIS

START PAEDIATRIC SEPSIS SIX

YES

SEND FULL SET OF BLOODS

ENSURE SENIOR CLINICAL REVIEW (ST4+) WITHIN 30 MINUTES

IF ANTIMICROBIALS ARE NEEDED, THESE SHOULD BE GIVEN AND A PLAN MADE FOR ESCALATION & SOURCE CONTROL WITHIN 3 HOURS

I have prescribed antimicrobials

This patient does not require antimicrobials as:

- I don't think this child has an infection
- This child is already on appropriate antimicrobials

- Other _____ GRADE: _____

NAME: _____ GRADE: _____

DATE: _____ TIME: : :

SIGNATURE: _____

NO AMBER CRITERIA = ROUTINE CARE / CONSIDER OTHER DIAGNOSIS



PCC



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SEPSIS SCREENING TOOL - THE SEPSIS SIX**AGE <16**

PATIENT DETAILS:

DATE:

TIME:

NAME:

DESIGNATION:

SIGNATURE:

COMPLETE ALL ACTIONS WITHIN ONE HOUR**01 ENSURE SENIOR CLINICIAN ATTENDS**

TIME

 : :

NOT ALL PATIENTS WITH RED FLAGS WILL NEED THE 'SEPSIS 6' URGENTLY. A SENIOR DECISION MAKER MAY SEEK ALTERNATIVE DIAGNOSES/ DE-ESCALATE CARE. RECORD DECISIONS BELOW

02 OXYGEN IF REQUIRED

TIME

 : :

START IF O₂ SATURATIONS LESS THAN 92% OR THERE IS EVIDENCE OF SHOCK

03 OBTAIN IV/IO ACCESS, TAKE BLOODS

TIME

 : :

BLOOD CULTURES (FULLY FILL AEROBIC BOTTLE FIRST!), BLOOD GLUCOSE, LACTATE, FBC, U&E'S, CRP AND CLOTTING LUMBAR PUNCTURE IF INDICATED

04 GIVE IV ANTIBIOTICS, THINK SOURCE CONTROL

TIME

 : :

MAXIMUM DOSE BROAD SPECTRUM THERAPY
CONSIDER: LOCAL POLICY / ALLERGY STATUS / ANTIVIRALS
EVALUATE NEED FOR IMAGING/ SPECIALIST REVIEW

IF SOURCE AMENABLE TO DRAINAGE ENSURE ACHIEVED AS SOON AS POSSIBLE BUT ALWAYS WITHIN 12H

05 GIVE IV FLUIDS

TIME

 : :

IF LACTATE 2-4 mmol/L GIVE FLUID BOLUS 10 ml/kg WITHOUT DELAY IF LACTATE >4 mmol/L CALL PICU. (REPEAT FLUID BOLUS IF REQUIRED)

06 CONSIDER INOTROPIC SUPPORT

TIME

 : :

CONSIDER INOTROPIC SUPPORT IF NORMAL PHYSIOLOGY IS NOT RESTORED AFTER ≥20 ml/kg FLUID (10 ml/kg IN NEONATES), AND CALL PICU OR A REGIONAL CENTRE URGENTLY

RED FLAGS AFTER ONE HOUR – ESCALATE TO CONSULTANT NOW**RECORD ADDITIONAL NOTES HERE:**

e.g. allergy status, arrival of specialist teams, de-escalation of care, delayed antimicrobial decision making, variance from Sepsis Six



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