Timing of antibiotics, volume, and vasoactive infusions in children with sepsis admitted to intensive care.

ESM_1_Joffe:

The case report form and study manual used for the chart review.

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CRF: The Timing of Intervention for Severe Sepsis in Children

ASB study number: STO_____

1. Age in months: _____

2. Location of presentation: ☐ER ☐An outside Hospital
☐Stollery Ward ☐Stollery PICU

3. Site of infection:
☐Meningitis
☐Bacteremia: ☐GPC Clumps CONS
☐GPC Clumps S aureus
☐GPC chains
☐GNB
☐Candida
☐Other
☐Pneumonia ☐Community
☐Nosocomial
☐Empyema
☐Abdominal
☐UTI
☐Fascitis
☐Mediastinits
☐Other

4. Times:
4A. Presentation: _____
4B. Acceptable Antibiotic(s) Time: _____
4C. Interval to acceptable antibiotic: _____ (hr:min)

For Septic Shock Subgroup: those put on inotropes on Day 1 of ASN inclusion:

5. Times for fluid:
5A. First fluid bolus time: _____
5B. Interval to first bolus time: _____ (hr:min)
5C. Fluid used: ☐NS ☐RL ☐Plasmalyte
☐FFP ☐PRBC ☐5% albumin
5D. Total volume given in first 2 hours: _____ ml/kg

6. Times for inotropes:
6A. First inotrope start time: _____
6B. What was first inotrope: ☐dopamine ☐dobutamine
☐epinephrine ☐norepinephrine
☐milrinone ☐phenylephrine
☐vasopressin
6C. Interval to first inotrope time: _____(hr:min)
6D. Total volume given before first inotrope start time: _____ ml/kg

ASN SEPSIS AND TIME OF ANTIBIOTICS AND FLUID BOLUS STUDY: GLOSSARY

Site of infection	Acceptable empiric antibiotic
Meningitis (community acquired)	Cefotaxime, Ceftriaxone, Meropenem, Ceftazidime <1month: also accept- Ampicillin and Gentamicin. If proven Listeria [growth from CSF], then only need Ampicillin alone.
Pneumonia -community	> 3mos: Ampicillin Any age: any of below Cefuroxime Cefotaxime Ceftriaxone Piperacillin-tazobactam Meropenem Imepenem Levofloxacin If proven MRSA [from blood culture, endotracheal aspirate, or empyema fluid]: Vancomycin Linezolid
-nosocomial	Piperacillin-tazobactam Meropenem Imepenem Ciprofloxacin If proven MRSA [from blood culture, endotracheal aspirate, or empyema fluid]: Vancomycin LInezolid
Empyema	Same as for community acquired pneumonia
Bacteremia -GPC clumps: CONS	Vancomycin
-GPC clumps: S.aureus	Vancomycin Cloxacillin Piperacillin-tazobactam Meropenem Imepenem Cefotaxime

	Ceftriaxone Clindamycin If proven MRSA: Vancomycin Linezolid
-GPC chains: Streptococcus sp. Enterococcus sp.	Vancomycin Piperacillin-tazobactam Piperacillin Meropenem Impenem Ampicillin Penicillin
-GNB E coli, Klebsiella sp, Pseudomonas sp, Enterobacter sp, others	Piperacillin-tazobactam Gentamicin Tobramycin Meropenem Imepenem Ciprofloxacin Aztreonam
-Candida sp.	Amphotericin: B, lipid complex, Abelcet, Ambisome Echinocandin: caspofungin, micafungin Fluconazole
Abdominal: appendicitis, bowel perforation or surgery, abscess, trauma	Ampicillin and Gentamicin/Tobramycin Clindamycin and Gentamicin/Tobramycin Ciprofloxacin and Metronidazole Piperacillin-tazobactam Meropenem Imepenem Ertapenem Ceftriaxone/Cefotaxime and Metronidazole
UTI	Ampicillin (community acquired) Gentamicin Tobramycin Piperacillin Piperacillin-tazobactam Meropenem Imepenem TMP/SMX (if sensitive) Ceftriaxone Cefotaxime If proven Enterococci [on urine culture]: Not to count: gentamicin, tobramycin, TMP/SMX, Ceftriaxone, or Cefotaxime
Fascitis	Penicillin and Cefotaxime/Gentamicin/Tobramycin

	Clindamycin and Cefotaxime/Gentamicin/Tobramycin Piperacillin-tazobactam Meropenem Imepenem If <u>proven Group A Streptococcus</u> [Group A Streptococcus, or Streptococcus pyogenes on blood culture or surgical specimen from fascitis]: Penicillin Clindamycin If <u>proven MRSA</u> [from same specimens as above]: Vancomycin Linezolid
Mediastinitis	One of Vancomycin/Cloxacillin/Ancef AND/OR: Piperacillin/tazobactam Gentamicin Tobramycin Imepenem Meropenem Ciprofloxacin

Miscellaneous less common sites:

a. Mastoiditis	same as for meningitis Piperacillin/tazobactam Imipenem
b. Cellulitis	same as for fascitis
c. Bacterial Tracheitis	same as for pneumonia (except for ampicillin)
d. Burns	same as for mediastinitis (i.e. nosocomial flora)
e. Retropharyngeal abscess	same as for pneumonia
f. Unknown source (community acquired)	same as for meningitis

Definitions:

Fluid bolus:
-NS, RL, Plasmalyte, 5% albumin, PRBC, FFP, Platelets
-20ml/kg

Time of presentation:
-ER: admission time to ER.
-ward or PICU: time that the following have occurred- new fever >38.2 and blood culture sent.

Antibiotic time:
-fulfills the criteria: intravenously (can be enterally for: ciprofloxacin, metronidazole, TMP/SMX), appropriate choice for site
-time: at the start of the infusion; if two antibiotics are required, then at the start time of the infusion for the second antibiotic.

Septic shock:
-inotropes (dopamine, dobutamine, epinephrine, norepinephrine, phenylephrine, or milrinone) started on day 1 of ASN.

Sepsis:
-as in ASN: SIRS due to confirmed or suspected infection

Nosocomial infection:
-the infection develops more than 72 hours after hospital admission

Community acquired infection:
-the infection is present on admission to hospital, or incubating on admission to hospital [defined as the infection developing within 72 hours of hospital admission].