STANDARD TREATMENT WORKFLOW (STW)

Sepsis and Septic Shock in Children

Shally Awasthi¹, Sushil Kabra², Neelam Mohan³, Pushpa Kini⁴, Suvasini Sharma⁵, Joseph Mathew⁶, Surjit Singh⁷, Kuldeep Singh⁸, Himanshu Chaturvedi⁹, Shinjini Bhatnagar¹⁰

¹King George’s Medical University, Lucknow; ²All India Institute Of Medical Science, New Delhi; ³Medanta, Gurgaon; ⁴Kasturba Medical College, Manipal; ⁵Lady Hardinge Medical College, New Delhi; ⁶Postgraduate Institute of Medical Education and Research, Chandigarh; ⁷Postgraduate Institute of Medical Education and Research, Chandigarh; ⁸All India Institute Of Medical Science, Jodhpur; ⁹Balrampur Hospital, Lucknow; ¹⁰Translational Health Science and Technology Institute (THSTI), Faridabad

CORRESPONDING AUTHOR
Dr. Shally Awasthi, Professor & Head, Department of Paediatrics, King George's Medical University, Lucknow Uttar Pradesh 226003
Email: shally07@gmail.com

CITATION
This work is licensed under a Creative Commons Attribution 4.0 International License.
©The Author(s). 2024 Open Access

DISCLAIMER
This article/STW, was originally published by Indian Council of Medical Research (ICMR) under Standard Treatment Workflow. The reprinting of this article in Journal of the Epidemiology Foundation of India (JEFI) is done with the permission of ICMR. The content of this article is presented as it was published, with no modifications or alterations. The views and opinions expressed in the article are those of the authors and do not necessarily reflect the official policy or position of JEFI or its editorial board. This initiative of JEFI to reprint STW is to disseminate these workflows among Health Care Professionals for wider adoption and guiding path for Patient Care.
Awasthi S, et al: Sepsis and Septic Shock in Children

Standard Treatment Workflow (STW) for the Management of Sepsis and Septic Shock in Children

ICD-A41.9, R65.21

**WHEN TO SUSPECT (2-59 MONTHS?)**

- Poor feeding
- Lethargy
- Decreased skin turgor/abnormal peristalsis
- Cold extremities
- Rash or shallow breathing
- Excessive vomiting
- Decreased urine output
- Combinations (acids base imbalance)
- Skinf rack

**CHECK FOR HISTORY OF**

- Prior treatment
- Recurrent infections
- Prior hospitalisation
- Chronic systemic illness (congenital or acquired)
- Immunisation (age appropriate)

**SIGNS OF SEVERE DERMATITIS**

- Should bring any of these: Lethargy or unconscious, not able to drink or drinks poorly, Sunken eyes, skin pinch gives back very slowly

**INVESTIGATIONS** (based on symptoms and available facility)

- Essential: Complete blood counts, peripheral blood film, urine routine, blood sugar, CRP, serum electrolytes, liver function test, kidney function test

**MANAGEMENT**

**DIAGNOSTIC ALGORITHM**

**CHILD (2-59 MONTHS) OF AGE WITH PERSISTENT ILLNESS (WITH WARNING SIGNS)**

**POOR PERIPHERAL PERSUASION**

- With fast pulse, cold peripheries, poor pulse volume, CRT > 5 seconds
- Fast pulse HB 100 in < 12 month old child, HB >120 in > 12 month old child

- Start IV, give 0.4 ml/kg of normal saline fluid bolus over 20-30 minutes
- Start antibiotics
- Start IV, give 0.2 ml/kg of normal saline fluid bolus over 20-30 minutes
- Start IV, give 0.1 ml/kg of normal saline fluid bolus over 20-30 minutes

**GOOD PERIPHERAL PERSUASION**

- Admit or initiate treatment as per man guidelines

**Complications**

- Respiratory failure
- Oxygen therapy
- Invasive ventilation
- Hypoglycaemia
- Blood pressure
- Fluid resuscitation
- Hypothermia
- Sepsis
- Septic shock

**DISCHARGE CRITERIA**

- Completion of antibiotics as per culture sensitivity
- Auscultation for all four hours
- Vital signs within normal limits
- Good oral intake
- Adequate urine output

**STOP & THINK: THREATS FOR INVASIVE PROCEDURES**

- Seizure
- Hypoglycaemia
- Decompression

**© 2024 JEFI**

S10