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Surviving Sepsis Campaign: International guidelines for management of severe sepsis and septic shock: 2008

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In the article by Dellinger et al., published in the January 2008 issue of *Intensive Care Medicine*, the addition of two tables, labeled Scheme 1 and Scheme 2, and subsequent text changes should appear as follows.

On page 19, the first sentence in the Methods section should read as follows.

Sepsis is defined as infection plus systemic manifestations of infection (Scheme 1) (12).

On page 19, the first full sentence in the second column should read as follows.

An example of typical thresholds for identification of severe sepsis is shown in Scheme 2 (12, 13).

Scheme 1 and Scheme 2, which were not included in the article, appear as follows.

Scheme 1 Diagnostic criteria for sepsis. *WBC*, white blood cell; *SBP*, systolic blood pressure; *MAP*, mean arterial blood pressure; *INR*, international normalized ratio; *a PTT*, activated partial thromboplastin time

Infection, documented or suspected, and some of the following:

General variables

- Fever ($> 38.3^{\circ}\text{C}$)
- Hypothermia (core temperature $< 36^{\circ}\text{C}$)
- Heart rate $> 90 \text{ min}^{-1}$ or $> 2 \text{ SD}$ above the normal value for age
- Tachypnea
- Altered mental status
- Significant edema or positive fluid balance ($> 20 \text{ mL/kg}$ over 24 hrs)
- Hyperglycemia (plasma glucose $> 140 \text{ mg/dL}$ or 7.7 mmol/L) in the absence of diabetes

Inflammatory variables

- Leukocytosis ($\text{WBC count} > 12,000 \mu\text{L}^{-1}$)
 - Leukopenia ($\text{WBC count} < 4000 \mu\text{L}^{-1}$)
 - Normal WBC count with $> 10\%$ immature forms
 - Plasma C-reactive protein $> 2 \text{ SD}$ above the normal value
 - Plasma procalcitonin $> 2 \text{ SD}$ above the normal value
-

Scheme 1 Continued

Hemodynamic variables

Arterial hypotension ($\text{SBP} < 90 \text{ mmHg}$, $\text{MAP} < 70 \text{ mmHg}$, or an SBP decrease $> 40 \text{ mmHg}$ in adults or $< 2 \text{ SD}$ below normal for age)

Organ dysfunction variables

Arterial hypoxemia ($\text{PaO}_2/\text{FIO}_2 < 300$)
 Acute oliguria (urine output $< 0.5 \text{ ml/kg hr}$ for at least 2 hrs despite adequate fluid resuscitation)
 Creatinine increase $> 0.5 \text{ mg/dL}$ or 44.2 micromol/L
 Coagulation abnormalities ($\text{INR} > 1.5$ or a $\text{PTT} > 60 \text{ secs}$)
 Ileus (absent bowel sounds)
 Thrombocytopenia (platelet count $< 100,000 \mu\text{L}^{-1}$)
 Hyperbilirubinemia (plasma total bilirubin $> 4 \text{ mg/dL}$ or 70 micromol/L)

Tissue perfusion variables

Hyperlactatemia ($>$ upper limit of lab normal)
 Decreased capillary refill or mottling

Diagnostic criteria for sepsis in the pediatric population are signs and symptoms of inflammation plus infection with hyper- or hypothermia (rectal temperature > 38.5 or $< 35^{\circ}\text{C}$), tachycardia (may be absent in hypothermic patients), and at least one of the following indications of altered organ function: altered mental status, hypoxemia, increased serum lactate level or bounding pulses.

Adapted from Levy MM, Fink MP, Marshall JC, et al: 2001 SCCM/ESICM/ACCP/ATS/SIS International Sepsis Definitions Conference. *Crit Care Med* 2003; 31:1250-1256

Scheme 2

Severe Sepsis = Sepsis-Induced Tissue Hypoperfusion or Organ Dysfunction (any of the following thought to be due to the infection)

- Sepsis induced hypotension
- Lactate $>$ upper limits lab normal
- Urine output $< 0.5 \text{ ml/kg hr}$ for $> 2 \text{ hrs}$ despite adequate fluid resuscitation
- ALI with $\text{PaO}_2/\text{FIO}_2 < 250$ in the absence of pneumonia as infection source
- ALI with $\text{PaO}_2/\text{FIO}_2 < 200$ in the presence of pneumonia as infection source
- Creatinine $> 2.0 \text{ mg/dl}$ (176.8 micromol/L)
- Bilirubin $> 2 \text{ mg/dl}$ (34.2 micromol/L)

- Platelet count < 100,000
- Coagulopathy (INR > 1.5)

Adapted from Levy, MM, Fink MP, Marshall JC, et al: 2001 SCCM/ESICM/ACCP/ATS/SIS International Sepsis Definitions Conference. *Intensive Care Medicine* 2003; 29:530–538. ACCP/SCCM Consensus Conference Committee: American College of Chest Physicians/Society of Critical Care Medicine Consensus Conference: Definitions for sepsis and organ failure and guidelines for the use of innovative therapies in sepsis. *Crit Care Med* 1992; 20:864–874

On page 21, the sentence in the second full paragraph should read as follows.

The committee assessed whether the desirable effects of adherence will outweigh the undesirable effects, and the strength of a recommendation reflects the group's degree of confidence in that assessment (Table 2).

The following errors appeared in Table 5.

1. Under Blood product administration recommendations:

Fresh frozen plasma recommendation circle should be open

Antithrombin recommendation circle should be closed

Platelet recommendation circle should be open

2. Under Glucose control:

Aim to keep blood glucose recommendation < 150 mg/dL (8.3 mmol/L) should have an open circle

On page 17 the Indian Society of Critical Care Medicine and the World Federation of Critical Care Nurses should be added to the list of sponsoring organizations who did not participate formally in the revision process.

The authors regret the errors.

References

1. Dellinger RP, Levy MM, Carlet JM, et al. (2008) Surviving Sepsis Campaign: International guidelines for management of severe sepsis and septic shock. *Intensive Care Med* 34:17–60