

## CLINICAL PRACTICE GUIDESLINES UNIT

### Corticosteroids for Sepsis and Septic Shock

#### **Objectives:**

To critically appraise a practice guideline for critically ill patients, with a focus on one embedded intervention considered for patients with sepsis and septic shock.

#### **Assignment:**

Read the first 8 pages of the attached guideline by Rhodes et al to orient you to the methods and the scope of this guideline. Consider the scenario below and complete the worksheet.

#### **Clinical Scenario:**

You are an intensive care physician, in the emergency room one morning doing several consults from the prior evening on call. The resident describes a 54 year old patient who had been admitted to the holding area in the department for over 12 hours. Her diagnosis was sepsis due to a recurrent E. coli urinary track infection. She initially presented alert but confused, protecting her airway, with a temperature of 39 degrees Celsius, blood pressure of 67/55 mmHg and heart rate of 100 beats per minute. After 4 liters of crystalloid resuscitation overnight, the resident started low dose norepinephrine infusion through a central venous catheter. The patient's blood pressure had increased to 100/60 mmHg, her heart rate decreased to 90 beats per minute and she was now afebrile. Blood work was normal except for a persistently elevated white blood cell count of  $15 \times 10^9/L$ , an increased serum creatinine level of 110  $\mu\text{mol/L}$  and lactate concentration of 3.7 mmol/L, which had previously been within normal limits. Commenting on how this patient fits the new Sepsis-3 definitions of septic shock demonstrating circulatory and cellular/metabolic dysfunction, the resident asks you if you would have started intravenous corticosteroids as she had done the night before.

#### **Enclosed Materials:**

1. Rhodes et al. Surviving Sepsis Campaign: International Guidelines for Management of Sepsis and Septic Shock: 2016. Crit Care Med 2017;45(3):1-67. DOI: 10.1097/CCM
2. Guyatt G, Drummond R, *Users' Guides to the Medical Literature: A Manual for Evidence Based Clinical Practice*, 3<sup>rd</sup> Edition (JAMA). New York, NY: The McGraw-Hill Companies, Inc, 2015. Chapter 22.4 – Grading Recommendations (679 – 702).
3. Worksheet for the evaluation of an article on practice guidelines.