**AHD 7/16/2024 Questions**

1. A 45-year-old woman is evaluated in the ICU for septic shock secondary to a necrotic diabetic foot infection. She has not responded to initial resuscitation with 30 mL/kg Ringer lactate infusion and vasopressor therapy. Medication are low-molecular weight heparin, insulin glargine, norepinephrine, vasopressin, metronidazole, ceftriaxone, and vancomycin.

On physical examination, temperature is 38.5 C (101.5F), blood pressure is 78/46 mm Hg, pulse rate is 102/mm, and respiration rate is 16/min. Oxygen saturation is 95% with the patient breathing ambient air. A 4-cm diameter recently debrided ulcer is present over the dorsal metacarpophalangeal joint of the great toe, extending to bone.

**Which of the following is the most appropriate additional management?**

1. Cosyntropin stimulation test
2. Intravenous hydrocortisone
3. Intravenous immune globulin
4. Procalcitonin measurement
5. A 72-year-old man is evaluated in the hospital for urosepsis. In the first hour of management, blood cultures were drawn, serum lactate measurement was obtained, empiric antibiotics were initiated, and fluid resuscitation was begun. In the first 3 hours of hospitalization, he received 3 liters of 0.9% saline.

Blood pressure is 80/45 mm Hg, and pulse rate is 112/min. Hemoglobin level is 9 g/dL.

**Which of the following is the most appropriate next step in management?**

1. Dopamine
2. Erythrocyte transfusion
3. Norephinephrine
4. Phenylephrine
5. A 67-year-old man is evaluated in the hospital for hyperglycemia 3 days after admission for a COPD exacerbation. Appropriate treatment was initiated with antibiotics, bronchodilators, supplemental oxygen, and systemic glucocorticoids. The patient’s oral intake remains good. Since the initiation of systemic glucocorticoids, fasting blood glucose levels have been consistently greater than 180 mg/dL and postprandial levels occasionally greater than 250 mg/dL.

On admission, hemoglobin A1c was 5.3%.

**Which of the following is the most appropriate management of this patient’s hyperglycemia?**

1. Basal and correctional insulin
2. Basal, prandial, and correctional insulin
3. Correctional insulin
4. Metformin
5. A 78-year-old woman is evaluated in the hospital following treatment with intravenous alteplase 8 hours ago for acute ischemic stroke. CT angiogram showed no large vessel occlusion. The National Institutes of Health Stroke Scale (NIHSS) score before and one hour after treatment was 9. She has atrial fibrillation and hypertension. Outpatient medications were warfarin, enalapril, and amlodipine. At the time of hospital admission, the INR was 1.0.

On physical examination, vital signs are normal. Oxygen saturation is 97% with the patient breathing ambient air. She has left facial weakness and dysarthria. The raised left arm and leg have a downward drift that contacts the bed, and there is a decreased sensitivity to pinprick on the left side. Heart rhythm is irregularly irregular.

**Which of the following is the most appropriate next step in management?**

1. Atorvastatin
2. Intravenous heparin
3. Oxygen by nasal cannula
4. Repeat head CT
5. Swallow evaluation
6. A 72-year-old woman is evaluated in the emergency department for a 1-hour history of left-sided weakness. The patient has hypertension and dyslipidemia. She has had no recent surgery or history of gastrointestinal, genitourinary, or intracranial bleeding. Medications are amlodipine and atorvastatin.

On physical examination, blood pressure is 168/92 mm Hg; the remaining vital signs are normal. Oxygen saturation is 97% with the patient breathing ambient air. Left facial weakness, dysarthria, decreased sensation to pinprick on the left side of the body, and left arm and leg drift are noted. A bedside swallow examination is positive for dysphagia. Her score on the National Institutes of Health Stroke Scale is 6. Neurologic examination reveals a normal mental status. The remainder of the physical examination is normal.

A CT scan of the head without contrast shows no intracerebral hemorrhages or early hypodensities.

Which of the following is the most appropriate treatment?

1. Intravenous alteplace
2. Intravenous low-molecular-weight heparin
3. Intravenous nicardipine
4. Aspirin