



### **Virtual Rotation Week 3 April 17, 2020**

#### **Learning objectives:**

#### **Case: Male with ARDS from Influenza A H1N1 2009**

Student will review case in the morning, write a complete SOAP note including plan and orders.

Case will be reviewed with live instructor who saw the patient above and then via webinar has done a complete case review with the student covering all pertinent clinical aspects of the case.

Student will complete a posttest to ensure they have met the learning objectives below:

#### **Upon completion of this exercise, the student should be able to show proficiency in the following learning objectives:**

Student is able to identify the pattern of influenza pneumonia on a chest x-ray

Student is able to identify similarities and differences between Influenza and COVID-19

Student is familiar with and can interpret the Florida Influenza Like Illness (ILI) report

Student is able to understand the indication and application of VV and VA ECMO

Student is able to identify acute respiratory acidosis on an arterial blood gas

Student is able to identify compensatory mechanisms in respiratory acidosis

Student is able to identify potential etiologies for persistent hypokalemia in a patient with IV fluid

Student is able to identify the relationship between potassium and magnesium in refractory hypokalemia

Student is able to identify the relationship between calcium and albumin levels in relation to corrected serum calcium

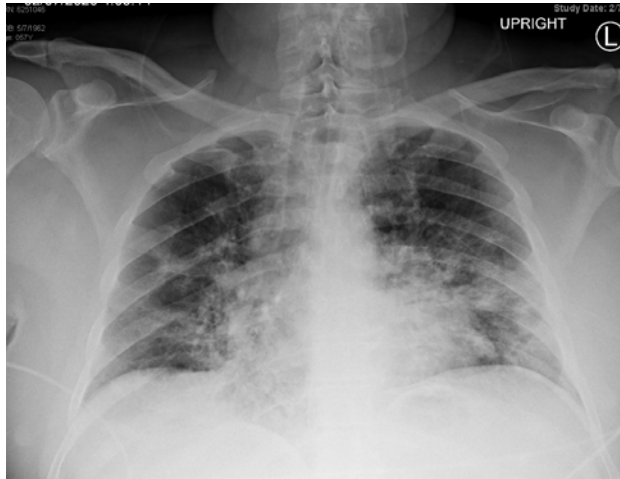
Student is able to recognize acute reactive hyperglycemia due to IV steroid use

Student is able to identify the appropriate antibiotic treatment for MRSA pneumonia

Student is able to identify the acute tissue damage associated with Staph pneumonia

**Questions:**

**Case: Male with ARDS from Influenza A H1N1 2009**



This x-ray pattern most likely represents which showed the following pneumonias?

- \*Influenza
- Strep pneumonia
- Klebsiella pneumonia
- Pseudomonas pneumonia

Which of the following statements is most correct about ECMO

- \*VV ECMO is used to replace lung function
- VA ECMO is used to replace only heart function
- VV ECMO only replaces heart function
- VA ECMO only replaces lung function

In a patient with a pH of 7.2, a CO<sub>2</sub> of 72 and a bicarb of 14 which of the following is most likely?

- \*Respiratory acidosis
- Metabolic acidosis
- Respiratory alkalosis
- Metabolic alkalosis

Which of the following most appropriately represents a compensatory mechanism in respiratory acidosis?

- \*Increased bicarb
- Decreased respirations
- Decreased bicarb
- Increasing hemoglobin

Which of the following is a potential etiology of hypokalemia?



\*IV fluid with no additives

Antacid use

SIADH

Addison's disease

Which is the following is true in a patient with hypomagnesemia?

\*Potassium will not replete until magnesium is repleted

Sodium will not replete and till magnesium is repleted

Magnesium will not replete until potassium is repleted

There is no relationship

Which is the following is true about the relationship between calcium and albumin levels?

\*A low serum calcium must be corrected in the presence of low albumin

A low serum calcium has no relationship to albumin

Phosphorus levels directly affect albumin levels in the blood

Calcium must be corrected in the presence of hyperglycemia

Which to the following is most likely to have caused a reactive hyperglycemia?

\*IV steroids

IV antibiotics

IV anti emetics

IV potassium

Which the following is the most appropriate coverage for suspected MRSA pneumonia?

\*Vancomycin

Cefepime

Azithromycin

Piperacillin tazobactam

Which is the following pneumonias is more likely to cause rapid lung damage?

\*Staph pneumonia

Strep pneumonia

Legionella pneumonia

Klebsiella pneumonia