

# Hospital Medicine Pearls



Dr. Jeffrey Doolittle  
Associate Program Director Via Christi Family Medicine Residency

# Case #1

- 80 yo female admitted with sepsis secondary to UTI
- 12 hours after admission call from nursing patient is confused and climbing out of bed.



# Delirium

- **Antipsychotics for Preventing Delirium in Hospitalized Adults: A Systematic Review.** Oh ES, Needham DM, Nikoobie R, et al. *Ann Intern Med.* 2019;171:474–484.
- **Effect of Intravenous Acetaminophen vs Placebo Combined With Propofol or Dexmedetomidine on Postoperative Delirium Among Older Patients Following Cardiac Surgery: The DEXACET Randomized Clinical Trial.** Subramaniam B, Shankar P, Shaefi S, et al. *JAMA.* 2019;321(7):686–696
- **Anxiety, Depression and Post Traumatic Stress Disorder after critical illness: a UK-wide prospective cohort study.** Hatch, R., Young, D., Barber, V. et al. *Crit Care* 22, 310 (2018)
- **Long-Term Cognitive Impairment after Critical Illness** P.P.Pandharipande, T.D..Girard, J.C. Jackson, et al. *October 3, 2013 N Engl J Med* 2013; 369:1306-1316

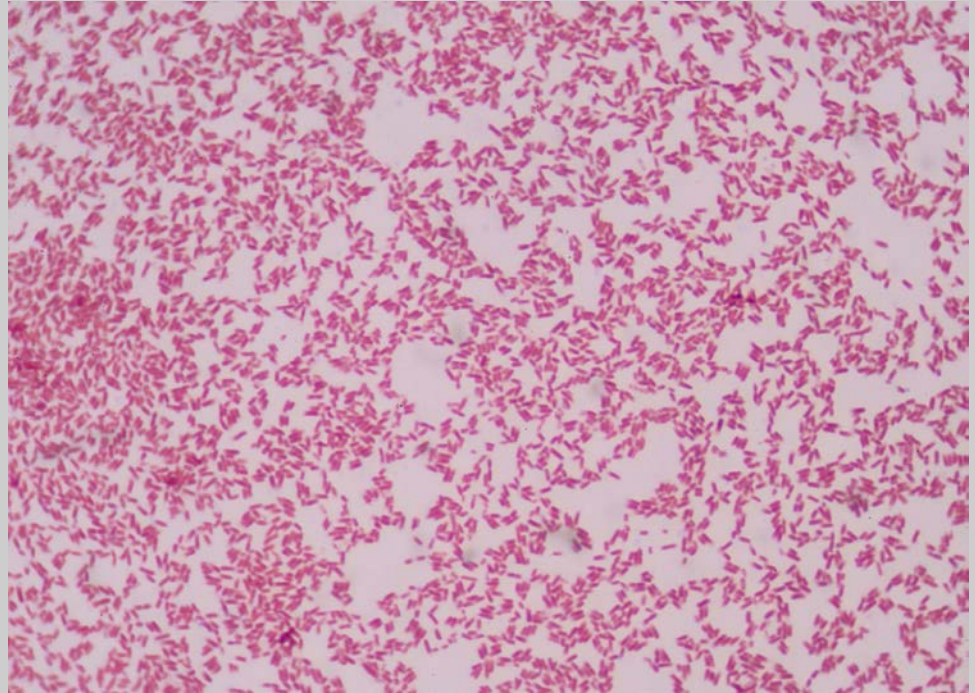
# Case #1

- Next morning patient is alert oriented, fever is gone but lab calls saying the blood culture is growing Gram negative bacilli



# Treating Gram-negative bacteremia

- Seven Versus 14 Days of Antibiotic Therapy for Uncomplicated Gram-negative Bacteremia: A Noninferiority Randomized Controlled Trial, Dafna Yahav, Erica Franceschini, Fidi Koppel, Adi Turjeman, et al *Clinical Infectious Diseases*, Volume 69, Issue 7, 1 October 2019, Pages 1091–1098



## Case #2

- 84 year old male from nursing home presents with fevers, chills, cough and dyspnea.
- T-38.2 P-115 R-25 BP 110/50  
Exam shows only crackles at right base



# 2019 Infectious Disease Society of America Practice Guidelines

## Key differences from 2007

Is this healthcare associated pneumonia?

What antibiotics should we use?

Should we use steroids?

What cultures should we obtain?

Should we get a procalcitonin?

Do we need to repeat x-ray tomorrow or down the road?

## Case #2

- Patient quickly improves vitals are stable on day 3 and patient is ready for discharge.
- How long should antibiotics last?
- IDSA recommends 5-7 days total if stable, if not stable after 5 days expanding coverage or looking for complications such as empyema or lung abscess.
- Excess Antibiotic Treatment Duration and Adverse Events in Patients Hospitalized With Pneumonia: A Multihospital Cohort Study. Vaughn VM, Flanders SA, Snyder A, et al. Ann Intern Med. 2019;171:153–163



## Case #3

- 80 year old admitted to ICU with COPD exacerbation and respiratory failure. Patient has prostate cancer, and is obese.
- You are getting ready to intubate, when nurse states blood pressure is now 100/70



# You order a stat IV fluid bolus

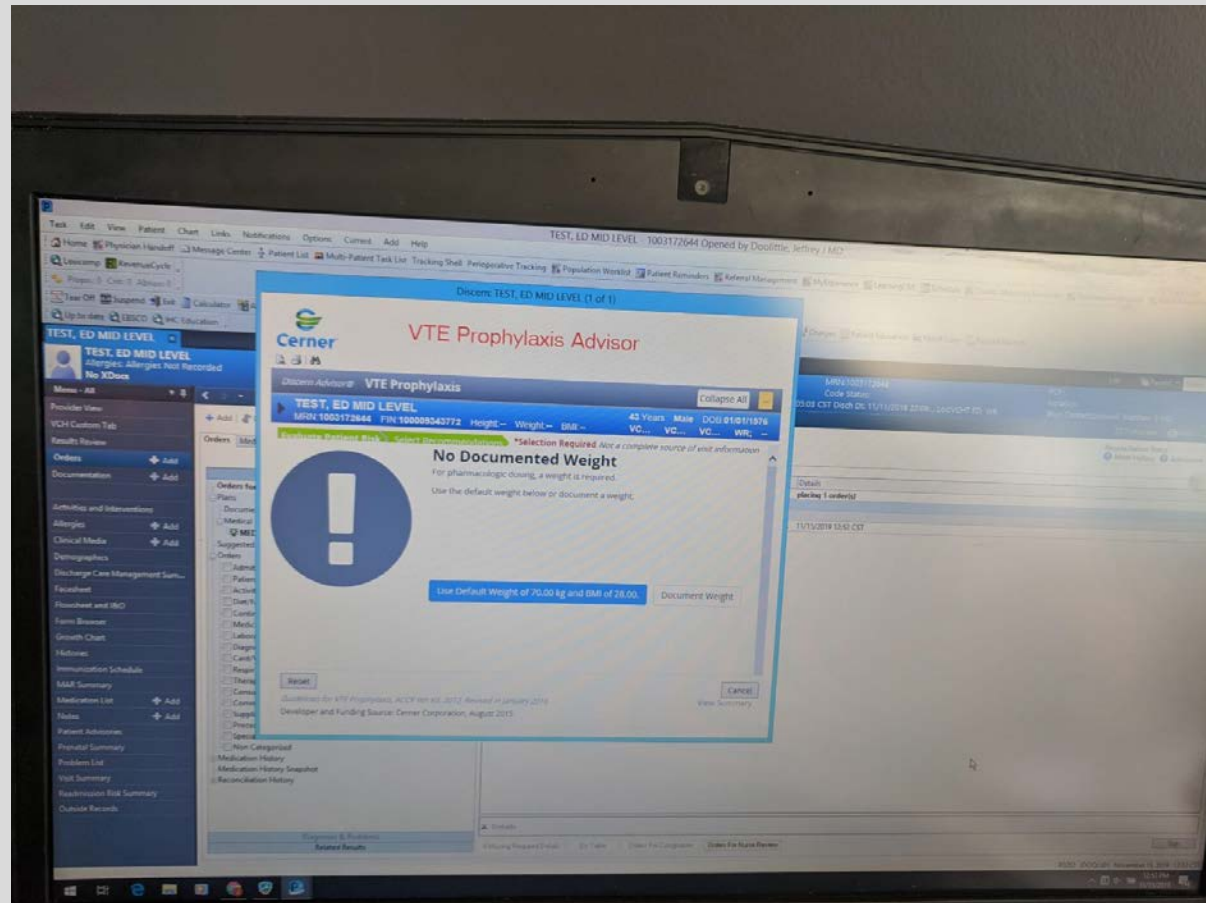
- Effect of a fluid bolus on cardiovascular collapse among critically ill adults undergoing tracheal intubation (PrePARE): a randomised controlled trial.

Janz DR, Casey JD, Semler MW et al. [Lancet Respir Med.](#) 2019 Oct 1. pii: S2213-2600(19)30246-2.



## Case #3 continued

- Post intubation orders are being placed when the EMR reminder pops up recommending VTE prophylaxis.



# VTE

- Adjunctive Intermittent Pneumatic Compression for Venous Thromboprophylaxis  
Y.M.Arabi.et al. N Engl J Med 2019; 380:1305-1315



# Case #3 continued

- Patient's initial lactate was 3.5
- You give a 30cc/kg fluid bolus total and repeat the level 2 hours later.
- The repeat level is still 3.1
- Some other causes of persistently elevated lactate:
  - Liver disease
  - Increased metabolism (accelerated glycolysis)
    - Fever
    - Adrenaline (or epinephrine administration)
    - Hyperthyroidism
    - Albuterol use
    - Thiamine deficiency
    - Ischemic bowel (anaerobic metabolism)
    - Carbon monoxide or cyanide
    - Metformin

# Sepsis Hypothesis driving studies

- Effect of Thiamine Administration on Lactate Clearance and Mortality in Patients With Septic Shock. Woolum JA et al. *Crit Care Med*. 2018 Nov;46(11):1747-1752
- Effect of a Resuscitation Strategy Targeting Peripheral Perfusion Status vs Serum Lactate Levels on 28-Day Mortality Among Patients With Septic Shock: The ANDROMEDA-SHOCK Randomized Clinical Trial. Hernández G, Ospina-Tascón GA, Damiani LP, et al. *JAMA*. 2019;321(7):654–664.

