Updates in Hospital Medicine

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Disclosures

- None
- Not a subspecialist

Objectives

Know the updated guidelines based on recent literature

- 1) Understand and know transfusion criteria in a patient with Acute MI and anemia
- 2) Understand the role and when not to utilize albumin infusion for those dx cirrhosis
- 3) Understand fluid management in acute pancreatitis
- 4) Understand duration of AC on discharge in a cancer patient
- 5) Know the treatment of C.diff based on the presentation

Outline

- Excludes COVID topics
- Primary literature in major medical journals (2020-present)
- Topics that will impact patient care
- Specialites

Cardiology

- 74 year old male with HTN, HLD, prostate CA presents with chest pain, elevated troponin and ST-T segment changes on EKG, Hb 7.5 (BL 12). Would you transfuse this individual?
- Yes/No

- REALITY Trial
- Compared to liberal strategy (transfusion for hemoglobin ≤8 or ≤10 g/dL, respectively), the restrictive group (reserving transfusions for hemoglobin <7 to 8 g/dL) showed a trend towards a lower risk of major cardiac events, including death, stroke, or recurrent MI
- Answer: Yes, transfuse Hb < 8 in patients with acute MI and anemia

Gastroenterology

Case #1

- 55 year old male with alcoholic cirrhosis (MELD 10), chronic anemia presents with increasing abdominal girth and ascites. Non complaint with medications. Vitals stable. Labs show albumin level 3.5. How would you treat this individual?
- r/o SBP, make sure he's not actively bleeding, IV diuretic and maybe diagnostic paracentesis
- Do you think he would benefit from albumin infusion? Yes/No

- In a trial, decompensated cirrhosis and serum albumin level <3.0 g/dL (30 g/L), compared with standard care, albumin infusion to achieve a level ≥3.0 g/dL (30 g/L)
- In fact, those given albumin had higher rates of pulmonary edema reported
- Answer: No, do not transfuse albumin

Case #2

- 60 year old male with alcohol abuse presents with severe abdominal pain, +CT showing acute pancreatic necrosis, elevated lactate. How would you treat this patient?
- In addition to doing IV Abx, NPO and pain control. What type of fluid do you order?
- NS or LR or D5 or D5W?

- Lactated Ringer's solution or normal saline?
- Conclusion: the use of LR did not impact the primary outcome of sepsis or septic shock prevalence at any time point, but did reduce hospital stay and ICU admissions
- NS or LR acceptable (use clinical judgment and labs to guide you)

Hematology

- 80 year old male with Prostate CA admitted for management of CAP. He was treated with IV Abx and now getting ready for discharge. You switch to PO Abx, how long do you continue AC on discharge due to history?
- 2 weeks
- 1 month
- 3 months
- 6 months
- Lifelong

- Patients with cancer are at particularly high risk of thrombosis
- The risk of VTE was not substantially lower in the extended prophylaxis patients (for >28 days post hospitalization) vs standard (14 days), but the risk of bleeding was much higher.
- Continue Lovenox for < 14 days (standard prophylaxis upon discharge)

Infectious Disease

- 45 year old male presents with bloody diarrhea, found to be C.diff +. He has a history of being treated for C.diff 3 months prior with PO Vancomcyin. VSS, WBC and Cr WNL. What do you do?
- A) Oral vancomycin
- B) Fidoxamicin
- C) Fecal tx
- D) Bezlotoxumab + vancomycin

- B. Fidoxomicin
- Strong recommendation with moderate quality of evidence
- New guidelines for tx of C.diff infections

Neurology

- 38 year old male with h/o GBS, admitted for management of acute respiratory failure. He was admitted to the ICU and intubated. He was given a dose of IVIg, however he does not improve within 48 hours. Do you give a second dose of IVIg?
- Yes/No

- No
- In a randomized trial with GBS and a poor predicted outcome, those assigned to a second course of IVIG (given two to four days after completion of the first course) had similar disability but more adverse effects, including thromboembolic complications, than those who were assigned to placebo

Updates in Pulmonary/Critical Care

Case #1

- 58 year old female with h/o CAD s/p CABG few years prior admitted for management of CAP, develops sudden onset shortness of breath. On physical exam, + for lower extremity swelling. Imaging studies cannot be obtained immediately due to being in a rural, remote area. What is the best option to aide in diagnosis at the moment to help guide your treatment plan?
- POCUS
- Clinical dx
- Look at previous imaging

- POCUS- improved the sensitivities of standard diagnostic testing for the detection of heart failure, pneumonia, pneumothorax, pleural effusion, and pulmonary embolism.
- However, it did not effect in-hospital mortality and length of stay were not significantly different for patients who did or did not receive POCUS.

Case#2

- 78 year old male with IDDM, admitted to the ICU for management of Sepsis secondary to UTI. SOFA >10. Labs horrible. He is started on IV Abx, pressors and intubated for airway protection. What additional treatment would you administer?
- A) IV hydrocortisone + Vitamin C + thiamine
- B) VTE prophylaxis
- C) Continue to monitor clinically
- D) Consider extubation

- B) VTE prophylaxis
- Lots of discussion regarding Hydrocortisone with VitC, thiamine. Three trials to date have shown no benefit. No difference in the Sequential Organ Failure Assessment (SOFA) score, rate of acute kidney injury, ventilator- or vasopressor-free days, or 30-day mortality were reported.
- Adverse events included hyperglycemia, hypernatremia, and possibly hospital-acquired infection.

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