Things We Do For No Reason

Adapted from the series in the Journal of Hospital Medicine
Case #1

• A 79 yo man with COPD, pAFib, and T2DM presents to the ED with worsening dyspnea and productive cough over the last 3 days requiring increased use of his albuterol inhaler.

• Other home meds include budesonide/formoterol, apixaban, metoprolol, metformin and glipizide.

• SHx: Former smoker (30py), rare EtOH

• Physical exam is notable for significant expiratory wheezes throughout along with frequent coughing. His SpO2 is now 97% on 2L NC. He appears euvolemic and heart is RRR.

• Labs:

<table>
<thead>
<tr>
<th>Test</th>
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</thead>
<tbody>
<tr>
<td>WBC</td>
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</tr>
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<td>11</td>
</tr>
<tr>
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<td>102</td>
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<td>Platelets</td>
<td>225</td>
</tr>
<tr>
<td>ABG</td>
<td>7.37/50/70</td>
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<tr>
<td>Na</td>
<td>136</td>
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<tr>
<td>K</td>
<td>3.6</td>
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<tr>
<td>Cl</td>
<td>100</td>
</tr>
<tr>
<td>Bicarb</td>
<td>29</td>
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<tr>
<td>BUN</td>
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<tr>
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<tr>
<td>Glucose</td>
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• Chest xray with hyperinflation, increased bronchovascular markings, no cardiomegaly
• He is admitted for a COPD exacerbation.

• Orders are placed and include:
  • nebulizer treatments q6hrs
  • oral prednisone and azithromycin
  • home apixaban and metoprolol are continued
  • he is started on sliding scale insulin
  • a B12 and folate are added to the following day’s labs to investigate the macrocytic anemia
What are your thoughts so far?

Anything you would do differently?

• Physical exam is notable for significant expiratory wheezes throughout along with frequent coughing. **His SpO2 is now 97% on 2L NC.** He appears euvolemic and heart is RRR.

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• Chest xray with hyperinflation, increased bronchovascular markings, no cardiomegaly
Supplemental Oxygen for Patients Without Hypoxemia

• In patients with COPD at risk for hypercarbia, O2 titrated to a goal SpO2 outside of 88%-92% is associated with a 2-fold risk of mortality\(^1\).

• A meta-analysis of 25 trials found for every 1% increase in SpO2 above 94%-96%, there was a 25% relative increase in in-hospital mortality\(^2\).

• Adverse effects of O2 include epistaxis, claustrophobia, decreased mobility, falls and delirium\(^3\).

1: Austin MA, Willis KE, Blizzard L, Walters EH, Wood-Baker R. Effect of high flow oxygen on mortality in chronic obstructive pulmonary disease patients in prehospital setting: randomised controlled trial. BMJ. 2010;341:c5462


• Recommendations:

  • For patients at risk of hypercapnic respiratory failure, target SpO2 of 88%-92%

  • Suspected MI: administer O2 if SpO2 < 90%

  • Other acutely ill patients, administer O2 if SpO2 < 92% and target no higher than 94%-96%

  • Exceptions: CO poisoning, decompression injury, gas embolism, cluster headaches, sickle cell crisis, pneumothorax

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  • home apixaban is continued
  • he is started on sliding scale insulin
  • a B12 and folate are added on to the following day’s labs to investigate the macrocytic anemia
Use of Nebulizer Treatments

- Decades of research show MDIs effective, efficient and less costly than nebulizers for routine tx of COPD exacerbations.

- Nebulizers
  - More expensive
  - Less portable & take longer to set up, use and clean
  - Associated with greater increases in heart rate and tremors compared to MDIs.

- Note that MDIs should be used with a valved holding chamber or spacer.

• He is admitted for a COPD exacerbation.

• Orders are placed and include:
  • nebulizer treatments q6hrs
  • oral prednisone and azithromycin
  • home apixaban is continued
  • he is started on sliding scale insulin
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Using Sliding Scale Insulin as Monotherapy

- SSI is a reactive strategy; never been shown to prevent hyperglycemia in hospitalized patients.

- Hyperglycemia is a marker for adverse outcomes among hospitalized patients and SSI monotherapy has a 3-fold higher risk.

- RABBIT 2 trial (2007)\(^6\)
  - Insulin-naïve diabetics randomized to SSI only or weight-based regimen of basal and prandial insulin

  - No difference in length of stay or rates of hypoglycemia, but 66% of basal-prandial patients achieved their glycemic control target vs 38% of SSI group.

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\(^6\) Umpierrez G. et al., Diabetes Care 30:2181–2186, 2007
• Recommendations

• Use weight-based insulin divided between half basal and half prandial
  • 0.4 units/kg for blood sugar ≤200mg/dL
  • 0.5 units/kg for >200mg/dL

• Caution with dosing:
  • Age over 70 yo
  • Impaired renal function
  • Situations where steroid doses are fluctuating

7: Ambrus D; O’Connor M, Things We Do For No Reason: Sliding-Scale Insulin as Monotherapy for Glycemic Control in Hospitalized Patients; J. Hosp Med; Feb 2019; Vol 14; Number 2
• He is admitted for a COPD exacerbation.

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Serum & RBC Folate Testing

• High false positives and false negatives

• Low pre-test probability:
  • Folate deficiency rare in US given fortification
  • A 2011 study showed prevalence 0.1% in inpatient/ED population

• Cost of test ranges from $2 to over $12
  • Folic acid supplement costs $0.01 per tablet

• Recommendations:\(^9\):

• Test for B12 in macrocytic anemia (note that MMA is a much more sensitive test for B12 deficiency)

• In patients suspected of having folate deficiency, treat with supplementation
  • Retest in 1-2 weeks

Day 2

- Patient feels his breathing is improving. The nurse pages and says the patient hasn’t had a bowel movement since admission.
  - Docusate is scheduled BID with PEG prn.

- The nurse also says that the patient’s blood pressure has been as high as 185/90 and wonders if there shouldn’t be some anti-hypertensives added.
  - An order is placed for hydralazine prn for SBP > 180
Thoughts?
Day 2

• Patient feels his breathing is improving. The nurse pages and says the patient hasn’t had a bowel movement since admission.

  • **Docusate is scheduled BID with PEG prn.**

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Prescribing Docusate for Hospitalized Patients

• Multiple studies & systematic reviews show docusate ineffective in changing the frequency or character of bowel movements.

• It may impact absorption of other treatments.

• Patients complain of the lingering aftertaste.

• Estimated cost of docusate to the healthcare system is over $100M per year in N. America\textsuperscript{10}.

\textsuperscript{10} Lee TC, McDonald EG, Bonnici A, Tamblyn R. Pattern of inpatient laxative use: waste not, want not. \textit{JAMA Intern Med.} 2016;176(8):1216-1217
### TABLE. Summary of Randomized Controlled Trials Studying Docusate

<table>
<thead>
<tr>
<th>First Author</th>
<th>Year Published</th>
<th>Sample Size (n)</th>
<th>Patient Population</th>
<th>Intent of Therapy</th>
<th>Site of Care</th>
<th>Docusate Dose</th>
<th>Comparator</th>
<th>Duration</th>
<th>Brief Summary</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyland⁹</td>
<td>1968</td>
<td>15</td>
<td>Geriatric patients in hospital with chronic constipation</td>
<td>Treatment</td>
<td>Hospital</td>
<td>Docusate sodium 100 mg tid</td>
<td>Placebo with crossover</td>
<td>Four weeks, then four weeks crossover</td>
<td>Increase in bowel movements with treatment</td>
<td>19 patients excluded because of placebo response</td>
</tr>
<tr>
<td>Goodman¹²</td>
<td>1976</td>
<td>34</td>
<td>Prophylaxis for Inpatients on “chronic medical service”</td>
<td>Prophylaxis</td>
<td>Hospital</td>
<td>Docusate sodium 100 mg bid</td>
<td>Control</td>
<td>26 days</td>
<td>No difference in frequency of quality of bowel movements</td>
<td></td>
</tr>
<tr>
<td>Fain¹³</td>
<td>1978</td>
<td>46</td>
<td>Institutionalized patients with chronic constipation</td>
<td>Treatment</td>
<td>Nursing home</td>
<td>Docusate sodium 100 mg daily, docusate sodium 100 mg bid, docusate calcium 240 mg daily</td>
<td>Placebo period for each arm</td>
<td>Two weeks placebo, three weeks treatment</td>
<td>An increase in frequency of bowel movements with docusate calcium 240 mg, but no change in quality. Increase in bowel movements in other arms did not meet statistical significance</td>
<td></td>
</tr>
<tr>
<td>Chapman¹⁴</td>
<td>1985</td>
<td>12</td>
<td>Healthy patients with ileostomies and healthy controls</td>
<td>Prophylaxis</td>
<td>Ambulatory</td>
<td>Docusate sodium 100 mg tid</td>
<td>Control with crossover</td>
<td>Four days</td>
<td>No difference in stool weight, frequency, water content, or transit time</td>
<td></td>
</tr>
<tr>
<td>Castle¹⁵</td>
<td>1991</td>
<td>15</td>
<td>Elderly veterans in nursing home on bowel regimen</td>
<td>Treatment</td>
<td>Nursing home</td>
<td>Docusate calcium 240 mg bid</td>
<td>Placebo with crossover</td>
<td>Three weeks then two weeks crossover</td>
<td>No difference in stool frequency, need for additional laxatives, or patient’s subjective experience</td>
<td></td>
</tr>
<tr>
<td>McRorie¹⁷</td>
<td>1998</td>
<td>170</td>
<td>Chronic idiopathic constipation</td>
<td>Treatment</td>
<td>Ambulatory</td>
<td>Docusate sodium 100 mg bid</td>
<td>Psyllium 5.1 g bid</td>
<td>Two weeks placebo, two weeks treatment</td>
<td>Psyllium increased stool water content and frequency; docusate had no change</td>
<td>Industry sponsored</td>
</tr>
<tr>
<td>Tarumi¹⁸</td>
<td>2013</td>
<td>74</td>
<td>Hospice patients Prophylaxis and treatment</td>
<td>Prophylaxis and treatment</td>
<td>Inpatient hospice</td>
<td>Docusate sodium 200 mg bid</td>
<td>Placebo</td>
<td>10 days</td>
<td>No difference in stool frequency, volume, or consistency</td>
<td>All patients received sennosides</td>
</tr>
</tbody>
</table>
• **Recommendations**¹¹:

  • **Schedule** laxatives w/ proven efficacy (such as PEG, lactulose, psyllium or sennosides) for constipation treatment

  • Discuss de-prescribing for patients using docusate prior to admission

  • Some advocate removing it from formulary.

Day 2

• Patient feels his breathing is improving. The nurse pages and says the patient hasn’t had a bowel movement since admission.
  • Docusate is scheduled BID with PEG prn.

• The nurse also says that the patient’s blood pressure is 185/90 and wonders if there shouldn’t be some anti-hypertensives added.
  • An order is placed for hydralazine prn for SBP > 180.
Acute Treatment of Hypertensive Urgency

• Little data exist to support acutely treating hypertension without end organ damage

• Blood pressures obtained in the hospital setting are often inaccurate\(^\text{12}\)

• Treating risks overly large reduction in blood pressure

• 2017 American College of Cardiology/AHA Guideline states:
  • “-there is no indication for referral to the ED, immediate reduction in BP in the ED, or hospitalization for [patients with hypertensive urgency]”

• **Recommendations**\(^\text{13}\):

  • Confirm no end-organ damage or symptoms

  • Identify treatable causes: pain, nausea, withdrawal, delirium, OSA, constipation, missed dose of home medication

  • Allow patient to rest for 30 minutes, then retake blood pressure using correct technique

  • Even if blood pressure is still elevated, risk-benefit ratio will typically favor withholding acute treatment

Photo by Hush Naidoo

Case #2

• 62 yo man with hx of homelessness, chronic pain and opioid use disorder on Suboxone presents with RLE pain and redness x3 days

• No other medications; no allergies

• SHx: denies any hx of IV drug use; smokes 6-10 cigarettes per day
Case #2 con’t

• On further questioning, he says that he has not been able to eat or drink much since his leg made it painful to walk. Pain is 9/10

• Vitals – T: 100; BP: 100/60; P: 102; R: 14; O2sat: 98% on RA

• Phys Exam: Mucous membranes dry. RLE appears red to below the knee, leg is swollen as compared to LLE, +TTP, no fluctuance or crepitus, no purulent discharge

Photo by Jake Travis
- Labs:

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<td>Bicarb</td>
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<tr>
<td></td>
<td></td>
<td>Cr</td>
<td>1.5 (bl 0.7)</td>
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<tr>
<td></td>
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<td>Glucose</td>
<td>98</td>
</tr>
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</table>

- Patient is given vanc/zosyn in the ED and admitted for cellulitis and AKI

- Workup for AKI includes FeNa
Things to think about:

How should his pain be managed?

What antibiotics would be appropriate?

What about ordering FeNa to help differentiate the cause of AKI?
Discontinuing Buprenorphine When Treating Acute Pain

• Prior recommendations: discontinue buprenorphine in patients taking opioid pain medications
  • Based on limited case reports

• Subsequent trials show concurrent use of opioid analgesics with buprenorphine effective at controlling pain

• Discontinuing buprenorphine puts the patient at risk of pain exacerbation, opioid withdrawal and predisposes the patient to return to use and overdose
• Recommendations\textsuperscript{14}

• Do not discontinue buprenorphine; consider the following options to manage acute pain:

  • Continue daily buprenorphine and prescribe short-acting agonists with high activity at mu receptor (such as morphine, fentanyl or hydromorphone)

  • Divide total daily buprenorphine dose into 3-4x per day dosing for better pain management and use short-acting agonists for breakthrough pain

  • Consider temporarily increasing daily buprenorphine; divide into 3-4x per day; can still prescribe short-acting opioids prn

\textsuperscript{14} Haber L, DeFries T, Martin M; Things We Do for No Reason: Discontinuing Buprenorphine When Treating Acute Pain; \textit{J. Hosp. Med.} 2019 Oct;14(10):633-635
Overtreatment of nonpurulent cellulitis

- Broad-spectrum antibiotics are commonly used in treatment for nonpurulent cellulitis, contrary to IDSA guidelines
  - One study showed 85% of patients received abx for MRSA, 61% received broad gram negative coverage, and 74% received anaerobic coverage\(^\text{15}\)

- IDSA recommends antibiotics for mild-moderate cellulitis be limited to ones effective against hemolytic strep and MSSA
  - A 2010 study found 73% of hospitalized adults with nonpurulent cellulitis had serologic evidence for strep infection; overall 95.8% responded to cefazolin monotherapy\(^\text{16}\)
  - Another study randomized patients to cephalexin alone or cephalexin + TMP/SMX and found no difference in response rates\(^\text{17}\)

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IDSA recommendations for treating nonpurulent soft tissue infections

**Mild Infections**
- No systemic signs of infection
  - **Oral Antibiotics:**
    - Penicillin VK or
    - Cephalosporin or
    - Dicloxacillin or
    - Clindamycin

**Moderate Infections**
- Systemic signs of infection
  - **Intravenous Antibiotics:**
    - Penicillin or
    - Ceftriaxone or
    - Cefazolin or
    - Clindamycin
    - Vancomycin†

**Severe Infections**
- Failed oral antibiotics or
- Systemic signs of infections or
- Severely immune-compromised* or
- Clinical signs of deeper infection such as hypotension or organ dysfunction
  - **Intravenous Antibiotics:**
    - Empirc broad-spectrum antibiotics
    - Emergency surgical consult
Using FeNa and FeUr in the Evaluation of an AKI

• The idea that FeNa < 1% is consistent with prerenal physiology vs >3% indicating ATI was established by a 1976 study of 17 oliguric patients

• Several studies since then have shown FeNa to be neither sensitive nor specific enough in the general inpatient population to be particularly useful, other than in hepatorenal syndrome

• FeUr only moderately increases post-test probability of prerenal azotemia

• If all Medicare patients discharged with AKI in 2013 received FeNa and FeUr testing, it would have cost $6M18

18: Centers for Medicare 275(8):630–634.
• Recommendations\textsuperscript{19}:

• FeNa can aid in the diagnosis of hepatorenal syndrome. Otherwise FeNa and FeUr can often be avoided

• Therapeutic intervention in pre-renal AKI should be guided by likely etiology of the disorder (fluids for hypovolemia, diuresis for decompensated HF, etc.)

\textsuperscript{19} Pahwa A, Sperati C; Urinary fractional excretion indices in the evaluation of acute kidney injury; \textit{J. Hosp. Med.} 2016 January;11(1):77-80
Case #2 con’t

- Overnight, nursing pages the night team saying the patient is trying to leave

- Upon questioning, the patient appears coherent, without delirium, and says he is leaving whether they agree with it or not

- He states he understands he is at risk of not getting the infection adequately treated but is willing to take his chances

Should they discharge him AMA?
Against Medical Advice Discharges

• Comprise up to 2% of all discharges\textsuperscript{20}

• Associated with increased relative risk of 30-day mortality and 30-day readmission rates\textsuperscript{21}

• Stigmatizes patient, can reduce access to care, and can reduce quality of discharge planning

• Clinicians may presume that AMA designation provides liability protection, but evidence does not support this


• Recommendations\textsuperscript{22}:

• Treat all discharges similarly; avoid designating an inpatient discharge as AMA

• Ensure there is documentation of the patient’s informed choice to leave

• Engage in shared decision making when possible

• Provide medically reasonable treatment options that promote harm reduction

\textsuperscript{22} Alfandre D, Brenner J, Onukwugha E; Things We Do For No Reason: Against Medical Advice Discharges; \textit{J. Hosp. Med.} 2017 October;12(10):843-845
Case #3

- 74 yo woman with mild cognitive impairment is brought in by family after 3 days of acute nausea and vomiting and inability to keep food or liquids down

- Medications: Donepezil

- SHx: Never smoker; no alcohol or drugs
• Vitals: T: 98.1; BP: 100/60; P: 100; R: 14; O2sat 99% on RA
  • BMI is 19 kg/m²

• Phys Exam: Patient appears thin and frail but is AOx3. Extremities cool and clammy.

• Labs: CBC nml; CMP: BUN 35; Cr 1.7 (baseline 0.9); ALT 1510; AST 1243; Alk phos 202 and total bilirubin 4.5

• Imaging: Ultrasound of the liver/gallbladder shows no bile duct dilation or gallstones.
What additional testing would you order?
Case #3 con’t

• Patient is admitted and additional liver labs are ordered that include a hepatitis panel, ferritin, ceruloplasmin, ANA, and anti-mitochondrial antibody

• Given her frail state, a pre-albumin was also ordered
Nondirected testing for patients with severe liver injury

- Immediately testing for rare causes of liver disease is low yield; the most common cause of liver injury is ischemic hepatitis²³

<table>
<thead>
<tr>
<th>Table. Causes of Severe Acute Liver Injury²³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disease</td>
</tr>
<tr>
<td>Ischemic hepatitis²³</td>
</tr>
<tr>
<td>Acute biliary obstruction¹,²</td>
</tr>
<tr>
<td>Drug-induced liver injury³</td>
</tr>
<tr>
<td>Viral hepatitis¹,³,⁸</td>
</tr>
<tr>
<td>Autoimmune hepatitis³,¹⁴</td>
</tr>
<tr>
<td>Wilson disease³</td>
</tr>
<tr>
<td>Hemochromatosis¹⁶</td>
</tr>
<tr>
<td>Primary biliary cholangitis¹⁶</td>
</tr>
<tr>
<td>Alpha-1 antitrypsin deficiency²</td>
</tr>
</tbody>
</table>

²³ Severe acute liver injury = liver enzymes >10 times the upper limit of normal.

NOTE: Abbreviation: PCR, polymerase chain reaction.

• Recommendations:\(^{24}\):

• Take a careful history and physical; assess for hypoperfusion

• Perform abdominal US to exclude biliary obstruction

• Obtain hepatitis panel only if patient is high risk for Hep B or Hep C (in our patient, could consider testing for Hep A)

Case #3 con’t

• Patient is admitted and additional liver labs are ordered that include a hepatitis panel, ferritin, ceruloplasmin, ANA, and anti-mitochondrial antibody

• Given her frail state, a pre-albumin was also ordered
Why prealbumin is not helpful for diagnosing malnutrition

- Prealbumin is not specific
  - It is a negative acute phase reactant

- Prealbumin is not sensitive
  - A systematic review showed that patients with mean BMIs as low as 13 kg/m2 could have normal prealbumin levels

- Prealbumin is not consistently responsive to nutritional interventions

• Recommendations\textsuperscript{26}:
  • Do not use prealbumin to screen for or diagnose malnutrition
  • Other, better diagnostic tools exist for assessing malnutrition

\textbf{TABLE 2. Comparison of Diagnostic Tools for Malnutrition}\textsuperscript{a}

<table>
<thead>
<tr>
<th>Historical Variables</th>
<th>AND/ASPEN\textsuperscript{a}</th>
<th>ESPEN\textsuperscript{b}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in weight</td>
<td>Weight loss (% over time)</td>
<td>Weight loss &gt;10% indefinite of time or &gt;5% over the last 3 months</td>
</tr>
<tr>
<td>Intake behaviors</td>
<td>Insufficient energy intake</td>
<td>NA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Examination Variables</th>
<th>AND/ASPEN\textsuperscript{a}</th>
<th>ESPEN\textsuperscript{b}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body fat</td>
<td>Loss of body fat</td>
<td>Fat-free mass index (FFM) &lt;15 (women) or 17 kg/m\textsuperscript{2} (men)</td>
</tr>
<tr>
<td>Muscle mass</td>
<td>Loss of muscle mass</td>
<td>NA</td>
</tr>
<tr>
<td>BMI</td>
<td>NA</td>
<td>BMI &lt;20 kg/m\textsuperscript{2} if &lt;70 years of age, or &lt;22 kg/m\textsuperscript{2} if &gt;70 years of age</td>
</tr>
<tr>
<td>Other exam findings</td>
<td>Fluid accumulation</td>
<td>NA</td>
</tr>
<tr>
<td>Functional capacity impairment</td>
<td>Reduced grip strength</td>
<td>NA</td>
</tr>
<tr>
<td>Additional information</td>
<td>Graded by severity and acuity</td>
<td>Graded by acuity</td>
</tr>
</tbody>
</table>

Criteria for diagnosis

<table>
<thead>
<tr>
<th>AND/ASPEN\textsuperscript{a}</th>
<th>ESPEN\textsuperscript{b}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two of 6 criteria required</td>
<td>BMI &lt;18.5 kg/m\textsuperscript{2}</td>
</tr>
</tbody>
</table>

\textsuperscript{a}Elements of diagnostic criteria are discussed. Each guideline or assessment tool requires a certain number of criteria to be met to establish a diagnosis
\textsuperscript{b}BMI <18.5 kg/m\textsuperscript{2} is a solitary criterion based on World Health Organization recommendations

Abbreviations: AND, Academy of Nutrition and Dietetics; ASPEN, American Society for Parenteral and Enteral Nutrition; BMI, body mass index; ESPEN, European Society for Clinical Nutrition and Metabolism; NA, not applicable.

Case #3 con’t

- The overnight team gets a page from nursing letting them know that the patient’s blood pressure was 88/60. The patient had been sleeping and was not reporting any symptoms.
Routine Overnight Vital Sign Checks

• While research does support frequent and consistent vital sign checks to minimize mortality and morbidity, overnight checks are usually not required for lower-risk patients

• Sleep disruptions in the hospital worsen health and impede healing; can increase pain perception, cause elevated blood sugars and increase risk of delirium

• In the era of COVID-19, limiting face-to-face encounters could help protect patients and staff
Recommendations:\n
- Risk stratify patients; ask yourself if this patient really needs Q4 vitals
- A risk stratification system such as MEWS (Modified Early Warning Score) can be helpful

Case #3 con’t

• The next day, nursing alerts the team that there has been a change in mental status

• On exam, patient is AOx1 with waxing and waning attention and mild agitation. No focal neuro deficits noted, though it’s difficult to perform a complete exam.

• A CT head is ordered
Neuroimaging for Hospitalized Patients with Delirium

- One study found only 6/220 patients who received head CT for delirium had an acute intracranial process (3 of them were on anticoagulation)\(^ {28}\)

- Often, sedating medications are required to complete the scan, worsening delirium

- Incidental findings can lead to further, unnecessary imaging

- The average charge for a head CT is approx $1400 at academic institutions

• **Recommendations**[^9]:

  • Delirious patients should undergo a thorough history including medication review and physical exam

  • Perform imaging if there is a hx of a fall in the preceding 2 weeks or if patient is on systemic anticoagulation

  • Consider imaging if there is a high degree of suspicion for embolic or metastatic processes

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Case #3 con’t

• On the 2\textsuperscript{nd} night of her hospital stay, nursing staff reports that the patient has become more confused, speaking to family members that aren’t present and picking at the tape around her IV line

• The night team prescribes quetiapine

What is the evidence for antipsychotics in treating delirium?
Use of Antipsychotics in Delirium

• Few studies demonstrate positive effects

• A 2016 systematic review of 19 studies concluded antipsychotics did not change the length of delirium or length of stay^{30}

• EPS, aspiration pneumonia, and arrhythmia are potential side effects that can complicate a patient’s hospital stay

• **Recommendations**\(^3\): 

  • Address underlying modifiable contributions such as medications, pain, sleep disturbance, electrolytes, ischemia, infection, withdrawal, and invasive lines

  • Focus on strategies like orientation, hydration, mobility, sensory aids, avoiding sleep interruptions, reducing lines if possible

  • Activity vests that consist of an apron with zips, ties and buttons can provide distraction

  • Reserve antipsychotics for when the patient poses an immediate threat to self or others

  • Treat for shortest possible duration with lowest effective dose

\(^3\): Pahwa, A; Qureshi I; Cumbler E; Things We Do For No Reason: Use of Antipsychotic Medications in Patients with Delirium; *J. Hosp. Med.* 2019 September;14(9):565-567
That's All!

What practices do you see that we may be doing for no reason?