

Nutrition Rounds—GI/Surgery Rotation  
 Krista Maruschak  
 6/2/2015

**Introduction**  
 MS is a 62 year old female with past medical history of liver cirrhosis, primary biliary cirrhosis, esophageal varices, ascites, chronic kidney disease, hypertension congestive heart failure, coronary artery disease and cholecystectomy (1/2013) admitted to Rush 5/15 from OSH with a temporary hip surgery for a repinning of the hip surgery and for liver transplant evaluation now s/p total hip arthroplasty. Liver decompensated post-surgery and now getting work-up for kidney liver transplantation.

**Hospital Day 18 (Tuesday, 6/2/1015)**

**Nutrition Assessment**

1. Anthropometrics
  - Ht: 167.6 cm Admit wt: 85 kg Current wt: 115.5 kg
  - BMI: 33 IBW: 59 kg %IBW: 158% AdBW: 64 kg
  - Weight history: Unremarkable per chart; Dry weight found from past outpatient clinic visit
  - Physical assessment: No fat or muscle wasting evident; severe lower extremity edema
  - SGA: A—Normal
  - Skin Integrity: Stage II pressure wounds on sacrum and buttocks
2. Client History
  - a. Medical/surgery history
    - Hip fracture surgery (pinning) 3/2015
    - Cholecystectomy 1/2013
  - b. Medications
    - cefTRIAxone, rifaximin, Levofloxacin, midodrine, lansoprazole, ursodiol, oxyCODONE , ondansetron, lactulose
  - c. Social History
    - Adequate with brother and sister in law usually at bedside
    - Decreased functional status from baseline due to hip surgery and hepatic encephalopathy
3. Labs and
 

6/1		6/2	
Na: 129	BUN: 51	Na: 129	BUN: 60
K: 4.7	Cr: 1.77	K: 4.9	Cr: 2.17
Cl: 101	Glu: 113	Cl: 101	Glu: 102
CO2: 17	Ca: 9.3	CO2: 17	Ca: 8.9
Phos: 2.7	Mg: 2.5	Phos: N/A	Mg: N/A
4. Food/Nutrition History
  - a. Food and nutrition prior to admit: Unable to assess
  - b. Current diet order: 1 L fluid restriction with general diet
  - c. Food allergies: Unable to assess
5. Estimated Nutrition Requirements
  - Calculating weight: 64 kg
  - Energy: 1600 kcal (25 kcal/kg)
  - Protein: 77 g (1.2 g/kg)

	<p>Fluid: 1000 mL (15 mL/kg)</p> <p>6. GI symptoms</p> <ul style="list-style-type: none"> <li>- Abdominal pain</li> <li>- Multiple BMs per day (induced due to hepatic encephalopathy)</li> </ul>												
Nutrition Diagnosis/PES	Inadequate food intake related to decreased appetite as evidenced by patient report and family report.												
Nutrition Intervention	<ul style="list-style-type: none"> <li>• Continue current 1 L fluid restriction diet order</li> <li>• Provide snacks PRN in between meals</li> </ul>												
Nutrition Monitoring and Evaluation	<ul style="list-style-type: none"> <li>• Patient to continue to consume at least 50% of meals and snacks during admission</li> </ul>												
Initial Impression	<p>Patient is a 62 year old female with past medical history of liver cirrhosis, primary biliary cirrhosis, esophageal varices, ascites, chronic kidney disease, hypertension and cholecystectomy (1/2013) admitted to Rush 5/15 for liver transplant evaluation and repinning of hip surgery now s/p total hip arthroplasty 5/28. Current 1 L fluid restriction diet order is appropriate and has been tolerating well. Patient and family report decreased intake/appetite today. Will send snacks in between meals to ensure adequate calorie and protein needs are being met. <b>No nutritional contraindications to liver and kidney transplant at this time</b></p>												
<b>Hospital Day 19 (Tuesday, 6/3/1015)</b>													
Events Since Last Visit	<p>-Dobhoff tube placed due to continued decrease of mental status</p> <p>-Awaiting x-ray ensuring proper placement before feeding</p> <p>-Labs</p> <table border="1" style="margin-left: 40px;"> <tr> <td colspan="2" style="text-align: center;">6/3</td> </tr> <tr> <td>Na: 134</td> <td>BUN: 65</td> </tr> <tr> <td>K: 3.7</td> <td>Cr: 2.27</td> </tr> <tr> <td>Cl: 101</td> <td>Glu: 95</td> </tr> <tr> <td>CO2: 19</td> <td>Ca: 9.1</td> </tr> <tr> <td>Phos: N/A</td> <td>Mg: N/A</td> </tr> </table> <p>-Edema: Worsening lower extremity edema</p>	6/3		Na: 134	BUN: 65	K: 3.7	Cr: 2.27	Cl: 101	Glu: 95	CO2: 19	Ca: 9.1	Phos: N/A	Mg: N/A
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Nutrition Diagnosis/PES	Inadequate oral intake related to hepatic encephalopathy as evidenced by altered mental status.												
Nutrition Intervention	<ul style="list-style-type: none"> <li>• <u>Recommended Goal Tube Feed</u>: Jevity 1.5 at 45 mL/hour over 24 hours + 1 packet Prostat</li> </ul> <p style="margin-left: 40px;">Recommended Goal Tube Feeds Will Provide:</p> <p style="margin-left: 40px;">Kcal/day: 1620 kcal</p> <p style="margin-left: 40px;">Kcal/kg: 25 kcal</p> <p style="margin-left: 40px;">Protein/day: 84 g</p> <p style="margin-left: 40px;">Protein/kg: 1.3 g</p> <p style="margin-left: 40px;">Free water from formula: 821 mL</p> <p style="margin-left: 40px;">Fluid/kg: 13 mL</p> <ul style="list-style-type: none"> <li>• Start tube feed at 20 mL/hour and advance by 20 mL per hour until goal rate reached</li> </ul>												
Nutrition Monitoring and Evaluation	<ul style="list-style-type: none"> <li>• Patient to tolerate goal tube feeding within 24 hours</li> </ul>												
<b>Hospital Day 20 (Tuesday, 6/4/1015)</b>													

Events Since Last Visit	<p>-Tube feedings not started yet</p> <p>-Labs</p> <table border="1"> <tr><td colspan="2">6/4</td></tr> <tr><td>Na: 134</td><td>BUN: 65</td></tr> <tr><td>K: 3.6</td><td>Cr: 2.26</td></tr> <tr><td>Cl: 102</td><td>Glu: 100</td></tr> <tr><td>CO2: 20</td><td>Ca: 9.2</td></tr> <tr><td>Phos: N/A</td><td>Mg: N/A</td></tr> </table>	6/4		Na: 134	BUN: 65	K: 3.6	Cr: 2.26	Cl: 102	Glu: 100	CO2: 20	Ca: 9.2	Phos: N/A	Mg: N/A
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<b>Hospital Day 21 (Tuesday, 6/5/1015)</b>													
Events Since Last Visit	<p><b>-Tube feedings started and patient tolerating well</b></p> <p><b>-New likely more accurate weight found in chart review, dry weight: 93 kg</b></p> <p><b>-New nutrient requirements:</b></p> <ul style="list-style-type: none"> <li>- Calculating weight: 68 kg</li> <li>Energy: 2040 kcal (30 kcal/kg)</li> <li>Protein: 82 g (1.2 g/kg)</li> <li>Fluid: 1000 mL (15 mL/kg)</li> </ul> <p><b>- NEW Recommended Goal Tube Feed</b>: Jevity 1.5 at 55 mL/hour over 24 hours  NEW Recommended Goal Tube Feeds Will Provide:  Kcal/day: 1980 kcal  Kcal/kg: 29 kcal  Protein/day: 84 g  Protein/kg: 1.2 g  Free water from formula: 1003 mL  Fluid/kg: 15 mL</p> <p>-Labs</p> <table border="1"> <tr><td colspan="2">6/4</td></tr> <tr><td>Na: 136</td><td>BUN: 58</td></tr> <tr><td>K: 3.5</td><td>Cr: 1.97</td></tr> <tr><td>Cl: 103</td><td>Glu: 141</td></tr> <tr><td>CO2: 21</td><td>Ca: 9.2</td></tr> <tr><td>Phos: N/A</td><td>Mg: N/A</td></tr> </table>	6/4		Na: 136	BUN: 58	K: 3.5	Cr: 1.97	Cl: 103	Glu: 141	CO2: 21	Ca: 9.2	Phos: N/A	Mg: N/A
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Nutrition Monitoring and Evaluation	<ul style="list-style-type: none"> <li>• Patient to tolerate new goal tube feeding within 24 hours</li> </ul>
Final Impression	<p>Patient is a 62 year old female with past medical history of liver cirrhosis, primary biliary cirrhosis, esophageal varices, ascites, chronic kidney disease, hypertension and cholecystectomy (1/2013) admitted to Rush from OSH 5/15 for repinning of hip surgery and liver transplant evaluation now s/p total hip arthroplasty 5/28 and evaluation of liver kidney transplant. Patient remains at nutrition risk due to patient inability to meet needs PO 2/2 hepatic encephalopathy. Recommend new above goal tube feeding to adequately meet patient calorie and protein needs. Anticipate patient will tolerate new goal feed and mentation to continue to improve and will continue to monitor intake and tolerance to tube feeds.</p>