

A Case Study from the Neurosurgical ICU at Harborview Medical Center

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Patient Background

- 50 year old female
- PMH: HTN, Osteoarthritis
- Family history of ruptured cerebral aneurysm
- ICA aneurysm found in 2002 & monitored as an outpatient by neurosurgery at HMC
- Primary diagnosis: scheduled clipping of left ICA and MCA aneurysm via left frontotemporal craniotomy

Initial Nutrition Note

- Ht: 93kg, Wt: 165 cm; BMI: 34; Adjusted BW: 77 kg
- Nutritional Requirements:
 - 1728 – 2016 kcal (1.2 – 1.4 x BEE)
 - 116 – 154 g pro (1.5 – 2.0 g/kg)
- Intubated, but extubation anticipated within the day
- Post-operative stroke diagnosed, therefore SLP speech evaluation required

Given that generally following this surgery patients transfer from the ICU to the floor within a day:

- Advance diet as tolerated per SLP recommendations
- If inappropriate for PO, TF recommendation, Promote with Fiber @ 80 mL/hr + 30 mL Prostat daily (provides 1980 kcal & 135 g pro)

Initiation of Feeding

- Trickle tubefeeds were started post-operative day 2 while awaiting SLP swallow evaluation
- Slowly titrated up to goal rate
- Onset of severe abdominal symptoms early post-operative day 3
- STAT KUB ordered & GI consulted
- New diagnosis: post-operative ileus

Post-Operative Ileus

Symptoms₁:

- Abdominal distention, bloating, and 'gassiness'
- Diffuse, persistent abdominal pain
- Nausea and/or vomiting
- Delayed passage of or inability to pass flatus
- Inability to tolerate an oral diet
- Absence of mechanical obstruction

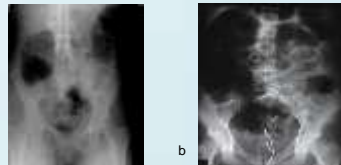
Recommendations₁:

- Bowel rest (nothing but sips of clear liquids)
- Electrolyte repletion
- NG tube suction
- Use opioids sparingly

With following these recommendations, the patient's symptoms began to improve.

Trickle tubefeeds were reinitiated post-operative day 5. Severe GI symptoms returned, leading to a new diagnosis...

KUB images of: (a) post-operative ileus, (b) Ogilvie's syndrome



Ogilvie's Syndrome

Symptoms₂:

- Nausea
- Vomiting
- Abdominal pain
- Constipation
- Diarrhea
- Abdominal distention
- Dilated colon

- Treat underlying diseases
- Replete electrolytes as necessary
- NPO
- MIVF
- NG at LIS
- Rectal tube
- Discontinue opiates & other unnecessary meds

Recommendations₂:

Total Parenteral Nutrition

At the point when Ogilvie's syndrome was diagnosed, the patient had received little to no nutritional support since her operation

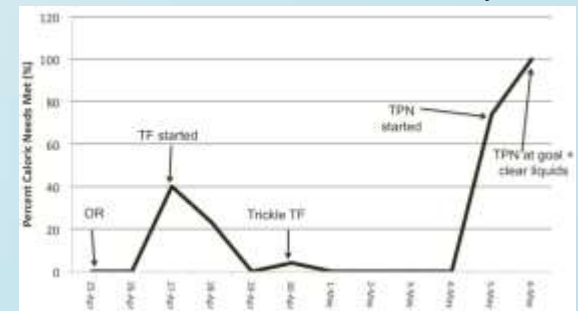
Patient also had no PICC line

TPN initiated post-operative day 10

•1st day TPN: 500 mL D50, 500 mL A15 (provides 1450 kcal & 150 g pro)

•2nd day TPN: 500 mL D50, 500 mL A15, 250 mL 20% IL (provides 1950 kcal & 150 g pro) & clear liquids initiated

Percent Caloric Needs Met Daily



References

1. Litkouhi, B. Postoperative ileus. In UpToDate, Soybel, D (Ed), UpToDate, Waltham, MA, 2011.
2. Camilleri, M. Acute colonic pseudoobstruction (Ogilvie's syndrome). In UpToDate, Waltham, MA, 2011.

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