Excerpts from Colocutaneous Fistula Case Study

Study of Enterocutaneous Fistula (ECF)/Colocutaneous Fistula (CCF)

Definition

- ECF can occur from duodenum, jejunum, ileum, colon or rectum
- Colocutaneous fistula: fistula connecting skin and colon
- Very rare complication of diverticular disease (Charalabopoulos, Misiakos, & Macheras, 2011), ischemic bowel, perforated ulcerations, appendicitis (Hoedema & Suryadevara, 2010)
- Can also be an iatrogenic complication (r/t medical tx or examination) (Hoedema & Suryadevara, 2010)

Study of ECF/CCF

Symptoms

- Small bowel obstruction
- Bloating
- Abdominal pain
- N/V/C/D

Badrasawi, M., Shahar, S., & Sagap, I. (2015). Nutritional Management in Enterocutaneous Fistula. What is the evidence?. *The Malaysian journal of medical sciences : MJMS*, 22(4), 6-16.

Study of ECF/CCF: Treatment

- Can be very difficult
- Goal of patient comfort and mobility

Medical

- Somatostatin analogs
- ABX

Surgical

- Debridement
- Laparoscopic surgery

Nutritional

- TPN
- TF
- Fistuloclysis

Wound Care

- Dressings
- Irrigation
- Wound VAC
- Drainage
- Eakin's ring

Teubner A, Morrison K, Ravishankar H, Anderson I, Scott N, Carlson G. Fistuloclysis can successfully replace parenteral feeding in the nutritional support of patients with enterocutaneous fistula . *Br J Surg*. 2004;91(5):625-631. doi: 10.1002/bjs.4520

Willoutts, K., Mercer, D., Ziegler, J. Fistuloclysis: An interprofessional approach to nourishing the fistula patient. *J Wound Ostomy Continence Nurs*. (2015);42(5):549-53.

Study of ECF/CCF: Complications and related diseases

Complications and related diseases

- Malnutrition
- Sepsis
- Dehydration/Diarrhea

Badrasawi, M., Shahar, S., & Sagap, I. (2015). Nutritional Management in Enterocutaneous Fistula. What is the evidence?. *The Malaysian journal of medical sciences : MJMS*, 22(4), 6-16.

Present admission

Principal Problem:

- Colocutaneous fistula (H/o duodenal perforation 8/2018, complicated by fistula)
- Also documented as enterocutaneous fistula

Active Problems during admission:

- Protein Calorie Malnutrition, severe, combined acute visceral protein attrition and severe erosion of lean body mass
- SP exploratory laparotomy with loop colostomy and drainage of abscess w/ Dr. Marshall 12/14
- SP diverting ileostomy
- Abscess
- AKI (acute kidney injury)
- Hyponatremia
- Surgical complication
- AKI (acute kidney injury)
- Hypotension due to hypovolemia
- Extensive bilateral lower extremity deep vein thrombosis (DVTs)

Medical nutrition therapy Initial Assessment 2/19

- New assessment for wound, unintentional wt loss, and gastric bypass surgery (2002)
- FULL LIQUID DIET
- Intake:
  - Refuses TF
  - On and off TPN since 8/2018. Long-term TPN in December and then discontinued for 3-4 weeks PTA
  - Decreased PO with anorexia, while on TPN, pt was only allowed clear liquids PO
- Barriers: Anorexia, dysgeusia, nausea, GASTRIC BYPASS SURGERY
- Wounds: stage 2 pressure injury to coccyx, L lower abdominal fistula, abscess
- Edema to flanks and legs

Initial Assessment

- NFPE:
  - Inadequate intake ≤ 75% EER ≥ 1 months (3-4 weeks)
  - 2% wt loss in 5 days; 30% in 6 months (significant)
  - Severe subcutaneous fat loss in orbital region
  - Severe muscle loss
  - Moderate fluid accumulation (3+ legs, 2+ flanks), significantly weaker hand grip strength

Medications of interest:

- Remeron
- Zofran
- Synthroid
- D5 NaCl with KCl

MEDICAL NUTRITION THERAPY INITIAL ASSESSMENT

Nutrition Recommendations:

- Sherbet shake with ProMod with meals
- See 2-3 days
- Juven BID
- Monitor intake,wt, labs
- Triglyceride lab
- TPN

- TPN recommendations (Refeeding risk):
- 150 ml D70
- 500 ml 10% AA solution
- 175 ml 20% Lipid solution
- TPN provides: 907 kcal, 50 gr.protein, 39% cho, 17% protein, 38% fat
- Once TPN starts, remove D5 from current IVFs

MNT Diagnosis

- **Severe Protein Calorie Malnutrition in the Context of Chronic Illness**