

Identifying Gaps In Patient Understanding of Home Enteral Nutrition Support for the Severely Malnourished Patient



Author: Linh Nguyen, BS, MS
University of Maryland Dietetic Internship

INTRODUCTION

Adherence to discharge diet instructions is an important concern for dietitians. Identifying barriers that reduce discharge instruction understanding and adherence are crucial to the successful treatment of severe malnutrition involving home enteral nutrition support.

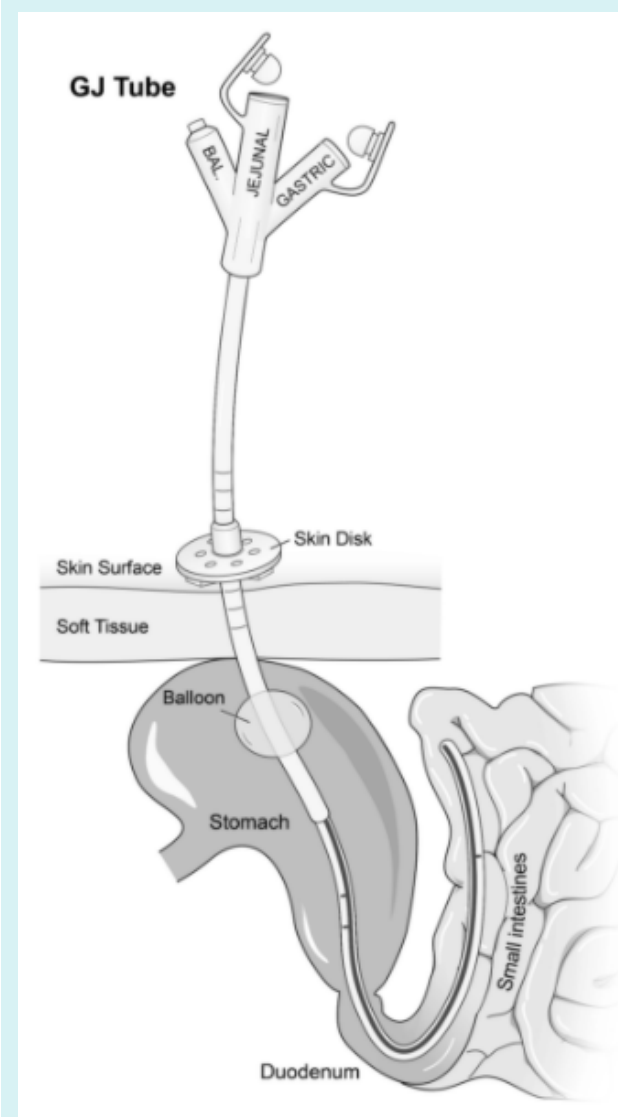
CASE DESCRIPTION

A 41-year-old Caucasian female, previously diagnosed with neuroendocrine pancreatic cancer, status post (s/p) Whipple resection with a gastrojejunostomy tube placed thirteen days prior to admission (pta), was admitted for acute cholangitis and bacteremia after her biliary drain dislodged.

Enteral nutrition (EN) was administered only once pta although the physician had ordered daily administration to supplement a limited oral intake. Poor oral intake was confirmed; no initial reason was provided by patient for failure to infuse prescribed EN.

The patient's nutrition diagnosis was "severe malnutrition based upon weight loss of >10% in 6 months and <75% of estimated energy requirement for >1 month".

Gastrojejunostomy Tube (GJ Tube)



A narrow tube enters into the upper abdomen and is threaded into the jejunum of the small intestine. Three access ports: gastric, jejunal, and balloon.

The gastric port of the tube resides in the stomach to vent air, drain fluids, and give medicine.

The jejunum port terminates in the jejunum of the small intestines used for feeding.

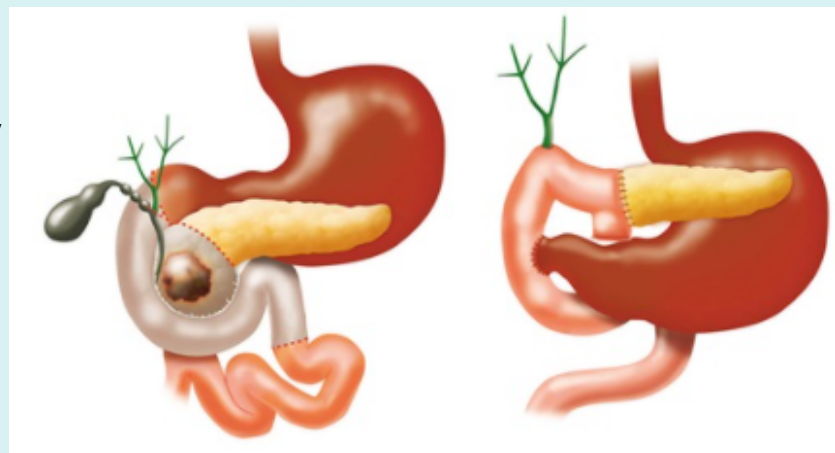
A small balloon sitting in the stomach aids the tube to stay in place.

UW Health. Gastrojejunostomy Tube (GJ Tube).

<https://patient.uwhealth.org/healthfacts/7986>. Accessed February 24, 2021.

Whipple Procedure

Removal of head of pancreas, portion of bile duct, part of duodenum, gallbladder, and associated lymph nodes. Some cases involve more extensive resection.



Whipple Procedure. Johns Hopkins Medicine Health.

<https://www.hopkinsmedicine.org/health/conditions-and-diseases/pancreatic-cancer/whipple-procedure>. Accessed January 30, 2021.

Conclusion

Identifying and addressing barriers to EN compliance prior to discharge are crucial for adherence following discharge.

NUTRITION INTERVENTION

Diet

Continue regular diet as tolerated.

Initiate tube feeding via GJ tube.

Nutrition Recommendations

Start at 1200 and end at 0800 (cycled x 20 hours).

Initiate Osmolite 1.2 at 30 mL/hr

Advance by 10 mL/hr q 4 hours as tolerated to goal rate: 75 mL/hr

Add water flushes: 100 mL q 4 hours (or per MD)

Provides 600 mL water

-Provides: 1800 kcal, 83 gm protein, 1500 mL volume, 1230 mL free water

-Total amount of water provided by tube feeding + water flushes: 1730 mL

DISCUSSION

Abdomen/pelvis CT scan demonstrated metastatic pancreatic neuroendocrine tumor with right kidney involvement; a positive blood culture required an IV antibiotics initiation.

EN education was initiated; patient now reported diarrhea after only EN administration pta. The patient was unable to describe prior EN formula and/or infusion instructions for medications and EN. EN non-compliance was assessed secondary to lack of knowledge for proper EN formula and medication administration. It was explained to the patient that "EN-associated diarrhea" could result from other factors including medications.

Prior to discharge, home care was set up to include nurse visits to monitor EN infusion.