Expert Session: Pancreatic and Bile Duct Cancer Oncology Nutrition Symposium, Orlando, FL May 2, 2014
Maria Petzel, RD, CSO, LD, CNSC Senior Clinical Dietitian
The University of Texas M. D. Anderson Cancer Center Houston, Texas mpetzel@mdanderson.org

### **Resources:**

Pancreatic (adenocarcinoma and neuroendocrine)-

- The Pancreatic Cancer Action Network
  - o www.pancan.org

# Pancreatic (neuroendocrine)-

- Caring For Carcinoid Foundation
  - o www.caringforcarcinoid.org
- NCI Pancreatic Neuroendocrine Tumors (Islet Cell Tumors) Treatment (PDQ®)
  - o www.cancer.gov/cancertopics/pdq/treatment/isletcell/HealthProfessional

#### Bile duct cancer:

- The Cholangiocarcinoma Foundation
  - o www.cholangiocarcinoma.org
- NCI Extrahepatic Bile Duct Cancer Treatment (PDQ®)
  - o www.cancer.gov/cancertopics/pdq/treatment/bileduct/HealthProfessional

#### **Topics:**

Perioperative nutrition Long-term nutrition after surgery Common integrative supplements Gastric outlet obstruction Diabetes

# Perioperative Nutrition

Preop-Impact Advanced Recovery

- Impact AR used preoperatively reduced infectious and total complications, and led to reduced LOS.
- Reference:
  - o Burden S, et al. Cochrane Review 2012- Pre-operative Nutrition Support in Patients Undergoing Gastrointestinal Surgery.

#### **Postop- Nutrition Support**

- ESPEN- give EN
- ASPEN- give EN over PN; give only if unlikely to meet needs for 7-10 days.
- Systematic review post Whipple only: No support of EN or PN over standard oral diet
- References:
  - o Weimann et al. Clin Nutr 2006.
  - o August JPEN 2009
  - Gerritsen et al. Britich J of Surg. 2013

### Long-term nutrition after surgery

- Best symptom management by avoid high-fat foods (limit to 75 g fat/day)
- Inadequate enzyme use may lead to deficiency
  - o B12
  - o Iron
  - o Fat soluble vitamins (A, D, E, & K)
  - Higher risk for osteoporosis

### Common supplement questions

- Curcumin-
  - Promising in use with pancreatic cancer- anti-tumor activity
  - o Poor oral bioavailability therefore large number of capsules
  - o Caution with biliary blockage and gallstones
- Fish oil
  - o Early studies showed promise with high doses of EPA but other studies show no benefit.
- Gonzalez regimen
  - o Diet, supplement, and enema regimen offered by private MD
  - o NCI funded study concluded survival and quality of life were better in patients treated with gemcitabine-based chemotherapy than for patients treated with the Gonzalez regimen

#### Gastric outlet or duodenal obstruction

- 15-20% of patients (often late onset)
- Characterized by vomiting retained food
- Treat with surgical bypass or endoscopically placed duodenal stent. If not possible then g-tube for decompression of the stomach and j-tube for feeding.
- Diet for stent
  - First establish tolerance of liquids before transitioning to a soft, low fiber diet as tolerated a few days later
  - Instruct patients to chew all foods well and to drink plenty of liquids with meals to ensure a liquid food bolus\
- References:
  - o Adler DG, Baron TH. Endoscopic palliation of malignant gastric outlet obstruction using self-expanding metal stents: experience in 36 patients. *Am J Gastroenterol*. 2002;97(1):72-78.
  - o Brooksbank MA, Game PA, Ashby MA. Palliative venting gastrostomy in malignant intestinal obstruction. *Palliat Med.* 2002;16(6):520-526.
  - Ly J, O'Grady G, Mittal A, Plank L, Windsor JA. A systematic review of methods to palliate malignant gastric outlet obstruction. *Surg Endosc.* 2009;24(2):290-297.
  - Teriaky A, Gregor J, Chande N. Percutaneous endoscopic gastrostomy tube placement for end-stage palliation of malignant gastrointestinal obstructions. Saudi J Gastroenterology: official journal of the Saudi Gastroenterology Association. 2012;18(2):95-98.

## **Diabetes**

- Management depends on side-effects and stage of disease
  - o On treatment/recovering from surgery: aggressive medication/insulin and liberal CHO diet
  - o Advanced disease: liberalize diet
  - o NED, treatment completed: carbohydrate counting
- References:
  - Sarner M. Treatment of pancreatic exocrine deficiency. *World journal of surgery.* 2003;27(11):1192-1195.
  - Poulson J. The management of diabetes in patients with advanced cancer. *J Pain Symptom Manage*. Jun 1997;13(6):339-346.