Inpatient Case Study

Dietetic Internship

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Medical Nutrition Therapy II

Clinical Rotation II

Riverside Medical Center

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**Inpatient Case Study**

1. **Nutrition Assessment**
2. Client History

BG is an 80 year old Caucasian oriented Male who lives at home with his wife and stated to the Nurse to have one alcoholic drink per week socially. Patient has a family history of lung cancer from his father, breast cancer from his mother and sister. Also, his son died from pancreatic cancer about 7 years ago.

Patient was admitted to Riverside Medical Center on 4/29/2015 with abdominal pain and acute pancreatitis status post recent endoscopic ultrasound and pancreatic mass biopsies on 4/27/2015 at University of Chicago Medical Center.

Patient was nutritionally screened and I was able to choose him for my case study as it was a different case which is not very common to be seen in the typical nutrition screen unless the patient is at very high risk in the ICU for pancreatitis.

Patient has a past medical history of: Hypertension, Hyperlipidemia, CAD, Atrial fibrillation on Coumadin, Gout, Depression, Pancreatic mass, CABG on 1/27/2013, and Obesity.

1. Food and Nutrition Related History

According with the History and Physical examination the patient has been having severe upper abdominal pain after the ERCP (Endoscopic Retrograde Cholangiopancreatography) done at University of Chicago Medical Center. The patient reported to have been eating light food including broths and chicken which he has been able to keep down. Patient feels bloated and has had no bowel movement for two days since 4/29/15.

4/29/2015- Patient was admitted to the ER where IV fluids were given as well as Morphine for the pain. The doctor’s plan was to have the patient NPO and IV fluids @ 250 cc/hr. for 24-48 hours and be able to control the pain with Morphine. This process was the appropriate to follow since the treatment for acute pancreatitis involves: giving pain medicines, give IV fluids and stopping food and fluid by mouth to limit the activity of the pancreas.

On May 2, 2015 they started the patient with Clear liquids and kept receiving IV fluids @ 100 ml/hr. After he tolerated it, they advanced the diet to Low-fat, GI soft. After visiting the patient he stated he tolerated the food and his appetite started to increase slowly. His PO intake was 50-60-75% x 3 meals. Patient stated to have a little bit of abdominal discomfort but his pain was improving. On that morning patient had a little bit of nausea but passing gas and had a bowel movement. Patient stated he does not follow a special diet at home and that his wife cooks at home.

I agreed with the diet recommendation from the doctor to be Low-fat as it is recommended that patients that suffer from acute pancreatitis follow a diet low in fat, avoid smoking and alcohol drinks after the attack has improved.

05/04/2015- Patient to be on Telemetry floor for his Hypertension control. The patient has been given multiple liters of IV fluid and has improved his PO diet.

05/05/2015- Patient to be NPO for scheduled esophagram due to patient feeling some dysphagia symptoms and suspecting laryngeal aspiration.

* Constipation improved.
* Post procedure pancreatitis resolved.
* After the video swallow evaluation was done there was no evidence of dysphagia.
* Patient was swallowing better.
* Patient discharged.

Medications and drug-nutrient interactions:

 Digoxin: Cardiac Glycoside, Cardiotonic, Antiarrhythmic, CHF treatment.

* + - Maintain diet with increased K, low Na and adequate Mg and Ca.
		- Take at least 2 hours before antacids or Mg supplements as they may decrease the absorption of drug.
		- Caution with Ca and/or Vitamin D supplements as they may increase the risk of arrhythmias.
		- Caution with some herbal products, e.g. aloe, foxglove, hawthorn and others.
		- There is no significant interaction with bran or grapefruit.

Enoxaparin: Anticoagulant

* + - Not with pork allergy as it is derived from porcine intestinal mucosa.
		- Caution with low renal function GFR < 30 due to it may decrease dose.

Indapamide: Hypertensive, Diuretic, Thiazide (K-depleting)

* + - Take in AM with food or milk
		- May need to decrease Na, low Ca, increase K, increase Mg (or K or Mg supplement)
		- May produce anorexia and increase thirst.
		- Limit alcohol. Not with lactation.
		- Caution with diabetes as it increases glucose levels.

Morphine: Analgesic, Narcotic, Opioid.

* + - May cause anorexia and decreases weight, increase thirst, dehydration.
		- Avoid alcohol.
		- Not with lactation.
		- May increase the risk of dental problems.

Protonix: Antigerd, Antisecretory

* + - May decrease absorption of Fe and Vitamin B12
		- Avoid gingko.

Zoloft: Antidepressant

* + - Avoid tryptophan supplement as it may increase drug side effects.
		- Caution with grapefruit/related citrus.
		- Avoid alcohol

Sotalol: Antiarrhythmic

* + - Take separately from Al or Ca, Mg antacids or CA or Mg supplement by at least 2 hours.
		- Avoid alcohol
		- Caution with diabetes as it may mask symptoms of and prolong hypoglycemia.
1. Anthropometric Measurements:

Admission weight: 228 lb. (104 kg)

Height: 72 in. (183 cm)

BMI: 31

Daily weights: (05/04/2015): 241 lb. (110 kg)

 (05/05/2015): 244 lb. (111 kg)

Patient has history of obesity.

There was a recent change in weight while patient was hospitalized due to he received multiple litters of IV fluids and that might contributed to his weight gain.

1. Biochemical Data, Medical Tests and Procedures

Laboratory results:

4/29/2015 4/30/2015 05/04/2015

Hgb 14.2 Hgb 12.8(L)

Na 136 Na 135(L) Na 131(L)

K 3.7 K 3.8 K 3.5

BUN 25(H) BUN 24(H) BUN 20

Cr. 0.8 Cr. 0.9 Cr. 0.6

Glu 138(H) Glu 110(H) Glu 143(H)

Calc. 9.3 Calc. 8.0(L) Phos. 1.9 (L)

Alb. 3.9 Alb. 3.4 Alb. 3.2

T. Prot. 6.7 T.Prot. 5.7(L) T.Prot 5.3(L)

Lipase 1939(H) Lipase 664(H) Lipase 30

Medical tests and procedures:

According with the History and Physical examination:

CT scan done by GI specialist on 4/10/15 showed dilated pancreatic duct at 7 mm without a mass. Patient was referred by GI to the University of Chicago Medical Center. They performed and Endoscopic ultrasound and biopsies to rule out pancreatic mass.

Patient underwent endoscopic ultrasound on 4/27/15 with the findings of a prominent major ampulla which was biopsied and FNA (Fine Needle Aspiration) Procedure. He had a 12 mm cyst and 15 mm solid mass in the uncinated process of the pancreas.

FNA reported from University of Chicago MC showed neuroendocrine tumor.

There was no evidence of bowel obstruction s/p CT.

CT of abdomen impression: development of moderate inflammation adjacent to the pancreatic head and uncinated process with persistent pancreatic ductal dilatation and small amount of peripancreatic fluid consistent with pancreatitis. No evidence of pancreatic necrosis of fluid collection. Mildly enlarged peripancreatic lymph nodes seen.

1. **Nutrition Diagnosis**
2. Altered Gastrointestinal Function related to compromised exocrine function of pancreas as evidenced by severe upper abdominal pain, bloating and constipation.
3. **Nutrition Intervention**

Discussed with the patient the importance of following a low fat diet after having pancreatitis for a better recovery and to avoid the pancreas to overwork and to create a hospital re-admission with other possible complications. Discussed with patient different forms of cooking and choosing non- fatty foods to help the pancreas to recover. Patient was receptive and interested in the low-fat diet handout. He was motivated to give and explain to his wife everything he learned from our conversation about the low-fat foods.

1. **Monitoring and Evaluation**

Will monitor PO intake

Will monitor weight gains and losses

Will monitor GI function changes

Will continue to evaluate laboratory values

1. **Supporting Article**

Acute pancreatitis: update on management from Clinical focus. (Nesvaderani M, Eslick G D, and Cox M R.)

Acute pancreatitis is a common acute surgical condition associated with high morbidity and mortality in severe cases.

New guidelines for management have recently been published by the American College of Gastroenterology and by the International Association of Pancreatology in collaboration with the American Pancreatic Association.

The main differences between the new and previous versions of the guidelines relate to the use of endoscopic retrograde cholangiopancreatography (ERCP) and the addition of the new severity category of ‘moderately severe acute pancreatitis.’

All patients with pancreatitis should have its cause determined by features of the history, results of laboratory tests (liver function tests, serum calcium triglyceride levels) and findings on trans abdominal ultrasound. Those with idiopathic pancreatitis should have endoscopic ultrasound as a first-line investigation.

 Acute pancreatitis should be managed with aggressive hydration with intravenous fluids and fasting.

 Oral feeding can be recommenced in mild pancreatitis once pain and nausea and vomiting have resolved.

Patients with mild biliary pancreatitis should have a laparoscopic cholecystectomy during their index admission.

 In addition to aggressive intravenous fluid resuscitation and fasting, patients with severe pancreatitis should have enteral feeding (nasoenteric or nasogastric feeds) commenced 48 hours after presentation. Total parenteral nutrition should be avoided where possible.

All patients with organ failure or severe pancreatitis as defined by the revised version of the Atlanta classification should be managed in an intensive care setting.

 Patients with biliary pancreatitis and concurrent cholangitis should have endoscopic retrograde cholangiopancreatography within 24 hours of presentation.

1. References
2. “Acute pancreatitis”. Available at: <http://www.nlm.nih.gov/medlineplus/ency/article/000287.htm>. Accessed 04/30/15
3. Cox, Michael R; Eslick, Guy D; Nesvaderani, Maryam. “Acute pancreatitis: update on management.” Clinical focus 4 May. 2015: 420-423. Print.
4. Pronsky, Zaneta. *Food Medication Interactions*. Birchrunville: Food-Medication Interactions, 2008. Print.