

Esophageal Cancer

Treated with Surgery & Radiation

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KNH 406

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Patient

- Nick Seyer
- 58 year-old, male, Caucasian
- 6' 3", 198 lbs, BMI 24.9
- UBW = 230 lbs, % UBW = 86%
- Chief complaint
 - Heartburn for “a long time” and difficulty swallowing during the past 4 or 5 months. Occasionally foods seems to “hang up” in this throat. He points to the upper portion of his neck, directly beneath his chin.

History and Physical

- Weight loss of 30 lbs in last several months
- Pain and heartburn, taking antacids
- Dysphagia
- Odynophagia
- Mother died of liver cancer
- Alcohol use
- Smokes
- Muscle wasting apparent
- Distressed, thin, pale

Diagnosis

- Chest X-ray, endoscopy, & CT scan
- Diagnosed with Stage IIB (T1, N1, Mo) adenocarcinoma of the esophagus
 - Adenocarcinoma - Adenocarcinoma indicates cancer that begins in glandular, or secretory, cells
 - T1 means “tumor invades lamina propria or submucosa”
 - N1 means “regional lymph node metastasis”
 - Mo means “no distant metastasis.”

Esophageal Cancer

- Relatively uncommon in US
 - 1% of all cancer cases
- Prognosis is poor due to advanced stage in which most patients present
 - 5-yr survival rate in 2002 was 14%
- Risk factors
 - Smoking and alcohol abuse
 - Barrett's esophagus (long-term GERD)
 - Diet low in fruits and vegetables
 - Male gender, African-American & Caucasian
 - Age 55+ (2x as likely to develop)

Esophageal Cancer

- Surgery
 - Transhiatal and transthoracic esophagectomy
- Radiation
- Chemotherapy
- Immunotherapy

- Tube feeding may progress to oral intake

Treatment Plan

- Transhiatal esophagectomy
 - Uses a laparotomy (incision through the abdominal wall) with blunt dissection of the thoracic esophagus and places the anastomosis (connection of two structures, in this case the esophagus and stomach) in the neck
- Feeding tube
 - Isosource HN 1.2 kcal @ 75 mL/hr x 24 hrs

Nutrition Requirements

- 3,150 kcal,
- 135 g protein
- 2,700 mL fluid
- Receiving
 - 2,160 kcal
 - 97 g protein
 - 1,885 mL fluid

Lab Values

Chemistry	Normal Value	Mr. <u>Seyer's</u> Value	Reason for Abnormality	Nutritional Implications
Albumin	3.5-5 g/dL	3.1 g/dL (L)	Weight loss, muscle wasting, and inadequate protein intake	Continued weight loss & muscle wasting due to inadequate protein intake, leading to a worse prognosis
Total protein	6-8 g/dL	5.7 g/dL (L)		
<u>Prealbumin</u>	16-35 mg/dL	15 mg/dL (L)		
CPK	55-170 U/L	172 U/L (H)	Low blood cell count is a side effect of cancer & treatment	May cause anemia
RBC	4.5-6.2 x 10 ⁶ /mm ³	4.2 x 10 ⁶ /mm ³ (L)		
HGB	14-17 g/dL	13.5 g/dL (L)		
HCT	40-54%	38% (L)		
ESR	0-15 mm/hr	17 mm/hr (H)		

PES Statements

- Inadequate intake from enteral nutrition related to use of Isosource HN at 75 mL/hr as evidenced by patient care summary sheet and lab values.
- Involuntary weight loss related to anorexia, dysphagia, and odynophagia as evidenced by weight loss of 30 lbs in the last several months.

Nutrition Recommendation

- Isosource HN at a rate of 110 mL/hr to meet his energy and protein requirements by providing 3,168 kcal and 143 g protein
- Transition to oral diet
- Monitor:
 - Weight weekly
 - Intake and output daily (INOS)
 - Lab values weekly (esp. albumin & prealbumin)
 - Assess physical appearance and enteral nutrition tolerance daily.

Prognosis

- Poor prognosis
- Lab values declining
- Terminal illness