

Cancer-Related Weight Loss

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Mr. A is a 70-year old man who was initially diagnosed with stage II colon cancer in 1990. Prior to diagnosis, he experienced an unintentional 23-pound weight loss. He underwent surgical resection, with additional surgery in 1992 for release of adhesions. He was treated with adjuvant 5-fluorouracil and leucovorin. In 2004, he developed a paratracheal mass that was diagnosed as large cell carcinoma as well as non-small cell lung cancer metastatic to the bone. Because the disease was unresectable, Mr. A received a combination of chemotherapy and radiation therapy.

Mr. A now has been admitted to the hospital with complaints of persistent nausea, intermittent vomiting, decreased oral intake, and dysphagia. He reports that the symptoms started about 10 days ago, and, since that time, he has lost an additional 10 pounds. His current medications include erlotinib, vitamin B₁₂, iron sulfate, pantoprazole, and fluconazole (Sweetman, 2004).

Assessment

A thorough history is important when assessing a patient's nutritional status and determining the proper nutrition intervention. The following information is important to note.

- Prior to his diagnosis of colon cancer, Mr. A was in good general health, with a typical weight of 165–170 pounds. He lost 23 pounds at the time of his diagnosis in 1990. His weight stabilized at 145 pounds for the next few years. He lost an additional 18 pounds in 2004, with his diagnosis of large cell carcinoma and non-small cell carcinoma. Since that time, his weight has been approximately 127 pounds (75% of his ideal body weight).
- Mr. A is now cachectic, with a history of anorexia following multiple treatments during the past two years. He also reports a significant decline in his appetite, and he has had difficulty

tolerating foods that he enjoyed before his diagnosis. He reports that he “has tried everything,” but despite how much he eats, his weight does not increase and usually decreases.

- Mr. A has a significant history of cigarette smoking (50 pack years). He also has a history of small bowel obstruction (December 2005), chronic obstructive pulmonary disease, chronic anemia, acute renal failure, chronic hydronephrosis, and esophagitis with Schatzki ring.
- Currently, no treatment is planned other than oral erlotinib. Side effects of erlotinib include decreased resistance to infection, anemia, sour taste, sore mouth, diarrhea, fatigue, and decreased appetite.
- Mr. A has experienced multiple complications related to his disease and treatment. The most significant factor is anorexia with weight loss, difficulty swallowing, persistent diarrhea, abdominal discomfort, and intermittent nausea with vomiting.

Findings on physical examination include height of 5 feet, 8 inches, and weight of 117 pounds (a loss of 10 pounds during the past three weeks). His skin

turgor is good, but he has a loss of muscle mass in the upper and lower extremities. Oral mucous membranes are moist, with no lesions noted. His swallow and gag reflexes are intact. Bowel sounds are normoactive, with no abdominal tenderness to palpation noted. Visceral protein is intact, with an albumin level of 4.4 mg/dl and prealbumin of 17.7 mg/dl.

A small bowel follow-through study reveals a partial small bowel obstruction, which is directly attributing to his nausea, vomiting, and recent weight loss. Mr. A has a nasogastric gravity tube placed for drainage and remains on a clear liquid diet, with a plan to advance the diet very slowly. This treatment will continue for the next 24–48 hours in anticipation that surgery will not be needed. If the diet cannot be advanced, total parenteral nutrition may be an alternative option to prevent further weight loss.

Although the primary concern is his intestinal obstruction, based on the information from the history and physical examination, Mr. A most likely has a secondary diagnosis of cancer-related anorexia and cachexia. His intestinal obstruction must be treated aggressively to avoid further complications. Following

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