

Chapter 30

NUTRITION IN CANCER PATIENTS

Mesut GÜMÜŞSOY1

INTRODUCTION

Cancer is among the main reasons of morbidity and mortality with anticipated increase of new cases over the next decades. Impaired nutritional status is among the major reasons of poor prognosis. Advanced stages of cancer increases the risks of malnutrition which may be secondary to gastrointestinal, psychologic, hormonal, tumoral or any other reasons.[1]

Malnutrition is deficiency in energy, protein, or other nutrients. Malnutrition, which can be prevented or reduced, ranges from 30 to 80% depending on underlying malignancy. Malnutrition is with poor prognosis and treatment results, increased risk of chemotherapy-induced toxicity and postoperative complications, decline in functional status, quality of life, longer duration of hospitalization, poorer hospitalization outcomes and survival, higher healthcare costs. [1-3]

Malnutrition diagnosis and treatment in cancer patients together with metabolic derangements are of major relevance. Increase in calorie intake usually does not result in anticipated response, and caloric supplementation can lead to complications without reversal.[4]

Nutritional intervention is effective in reducing weight loss and intolerance to cancer treatment secondary to malnutrition, hospital admission and improving quality of life. Oncology patients are mainly consulted to a dietitian at present, and mainly are treated with oral nutritional supplements (ONS) or tube feeding (TF). [3,5] Each institution dealing with oncology patients should have standard procedures for screening, preventing, assessing in detail, monitoring and treating malnutrition.[6]

CANCER CACHEXIA

In oncology patients malnutrition often is with cancer cachexia, which manifests itself with systemic inflammation, negative protein and energy balance, loss of lean body mass.[7] Increased synthesis and secretion of pro-inflammatory

1 Uzman doktor, Ankara Üniversitesi Gastroenteroloji B.D.,mesutgumussoy1987@hotmail.com

the TEE should be supplied first 48 hours of feeding. If severe depletion is present 5–10 kcal/kg/day of upper limit should not be exceeded and slow increments should be done to reach full substitution in seven[21]. If suspected, potassium, phosphate and magnesium levels should be monitored.

PHARMACOLOGICAL AGENTS

Pharmacological agents may be required for adequate nutrition are:

- Antiemetics (nausea)
- Antimicrobials (infection)
- Analgesics (pain)
- Saliva induction (xerostomia)
- Anti-secretories (excessive saliva or vomiting)
- Inhibitors of gastric acid (mucosal lesions or oesophageal reflux)
- Agents for intestinal motility (constipation or diarrhea)
- Antidepressants, (depression, distress, anxiety)
- Corticosteroids, progestins, cannabinoids (apetite)
- Androgens (muscle mass)
- Amino acids (fat free mass)
- Prokinetic (early satiety)[1, 3, 4, 21, 24, 30, 31]

SUMMARY

Malnutrition still affects 39% of cancer patients and at present more than one third of the patients with malnutrition are not prescribed any supplements and not receive dietary advice. Malnutrition is associated with disease severity, radiotherapy and chemotherapy. Different intervention approaches have varying degrees of effectiveness on clinical outcomes. NC with or without ONS is associated with improvements in different aspects of nutritional status; weight gain and maintenance, BMI and PG-SGA change. Individual dietary counseling has some beneficial effects.[27]

Systematic screening necessary for patients with cancer. Further studies are needed to evaluate the benefits of screening with respect to disease outcomes and the tolerability of cancer therapies.[20]

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