Chemotherapy-Induced Diarrhea Evaluation Table 2023: Oral Nutritional Interventions

General Evidence

Citation	Design/Method Sample/Setting	Variables and Intervention	Outcome Measures	Results/Analysis	Limitations	Quality and Nursing Implications
Abdollahi, R., Najafi, S., Razmpoosh, E., Shoormasti, R. S., Haghighat, S., Raji Lahiji, M., . . . Zarrati, M. (2019). The effect of dietary Intervention along with nutritional education on reducing the gastrointestinal side effects caused by chemotherapy among women with breast cancer. *Nutrition and Cancer, 71*(6), 922–930. https://doi.org/10.1080/01635581.2019.1590608	**Design:** Randomized controlled trial **Method:** Face-to-face nutrition education was provided by a trained dietitian. A recommended diet was given based on individual patient characteristics (age, weight, height). **Sample:** 150 women with breast cancer undergoing chemotherapy (75 in the intervention group and 75 in the control group), with a mean age of 46.8 years (intervention) and 46.1 years (control). **Setting:** Single-center—University of Medical Sciences, Tehran, Iran; Ambulatory Care	**Independent Variable(s):** Standardized education and dietary recommendations **Dependent Variable(s)**: Gastrointestinal side effects: reflux, chest pain, dyspepsia, anorexia, nausea, vomiting, gastritis, constipation, and diarrhea. **Intervention**: One-hour patient education face-to-face session, diet education for 10 weeks. Diet consisting of 12%–15% (by calories) protein, 30%–35% fat, and 55%–60% carbohydrates, individually estimated per participant.	Measurements of multiple side effects including the following: reflux, chest pain, dyspepsia, anorexia, nausea and vomiting, gastritis, constipation, and diarrhea. Researcher-designed, 12-question questionnaire based on the ROME III questionnaire Compliance monitoring through telephone contact	Compared to the control group, the intervention group's gastrointestinal symptoms were reduced significantly in the third session of chemotherapy compared with the first session for the following outcomes: Anorexia: time 1, 63%; time 3, 28.8%; $p < 0.001$ Diarrhea: time 1, 34.2%; time 3, 6.8%; $p < 0.001$ Nausea: time 1, 50.7%; time 3, 28.8%; $p = 0.002$ Constipation: time 1, 58.9%; time 3, 30.1%; $p < 0.001$ Dyspepsia: time 1, 57.5%; time 3, 31.5%; $p < 0.001$	Findings are limited to patients with breast cancer undergoing chemotherapy. Unblinded study No appropriate attentional control condition—the control group was asked not to change their diet and received written nutritional education. Randomized allocation was done by the nutritionist.	Standardized dietary intervention along with nutritional education provided by a trained dietitian for 10 weeks among women with breast cancer resulted in significant improvements in gastrointestinal side effects, particularly reflux, dyspepsia, anorexia, nausea, constipation, and diarrhea in the intervention group. There was also a reduction in the number of patients who did not complete their scheduled chemotherapy because of intolerable side effects, though not measured for statistical significance. Nurses are well-positioned to provide nutritional education when necessary or to support this intervention. This is an intervention that nurses could initiate if a dietitian is unavailable or that nurses could follow up on when they see patients for chemotherapy.

Clinical Practice Guidelines

Guideline Citation	Purpose	Sample / Setting	Significant Recommendations	Limitations	Quality and Nursing Implications
Bossi, P., Antonuzzo, A., Cherny, N.I., Rosengarten, O., Pernot, S., Trippa, F., . . . Ripamonti, C.I. (2018). Diarrhoea in adult cancer patients: ESMO clinical practice guidelines. *Annals of Oncology*, *29*(Suppl 4), iv126–iv142. https://doi.org/10.1093/annonc/mdy145	To provide guidance related to the identification, assessment considerations, and treatment options for adult patients with cancer experiencing diarrhea.	Adult patients receiving cancer therapy.	Thorough assessment of symptoms and severity combined with nutritional counseling, and diagnostic testing is recommended for diarrhea related to chemotherapy, immunotherapy, and/or radiation therapy. For patients with uncomplicated chemotherapy-induced diarrhea, conservative management with oral hydration and loperamide is recommended. Patients with mild to moderate diarrhea are encouraged to record and track their symptoms and stool frequency; diet modifications are also recommended. Recommendations for patients with complicated diarrhea include hospitalization and the same loperamide dosing as recommended for uncomplicated diarrhea, in addition to intravenous fluids and electrolytes. Octreotide can also be initiated. Neutropenic colitis recommendations include broad-spectrum antibiotics, nasogastric decompression, bowel rest, intravenous rehydration, intravenous electrolytes, granulocyte–colony-stimulating factors, and avoidance of antidiarrheal, opioid, and anticholinergic agents. Other recommendations for chemotherapy-induced diarrhea include bile acid sequestrants, steroids such as budesonide, and uridine triacetate for diarrhea related to 5-fluorouracil and capecitabine.	Most recommendations are derived from lower-level evidence with limited clinical benefit with the exception of loperamide References include articles more than 20 years old. Detail is lacking on the search strategy used to determine articles reviewed and included.	Most recommendations derived from lower-level evidence with limited clinical benefit, with the exception of loperamide. Nurses assess symptom severity and recommend strategies for management, including oral hydration and dietary modification. Patients are educated about tracking symptoms and the frequency and effectiveness of antidiarrheal treatments.