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The challenge for nutritional care in a cancer center: The need for integration between clinical nutritionist, oncologist, and palliative care physician

To the editor,

We were very interested to read the paper by Caccialanza et al¹ on the challenging issue of cancer-related malnutrition in oncology. We fully agree on the need for effective educational initiatives for cancer patients and their healthcare providers, and on the importance of nutritional screening and assessment from the very start of their cancer care. The literature confirms that malnutrition is common in oncology but is often detected too late, with patients receiving suboptimal nutritional support. An early evaluation of nutritional risk integrated into routine practice is the way to ensure a timely referral to a nutritional unit for at-risk patients.²

A recent multinational retrospective study confirmed that in real-world clinical practice, cancer-related malnutrition is under-recognized and undertreated, undermining optimal oncologic outcomes for patients at nutritional risk.³ The European Society for Clinical Nutrition and Metabolism has published guidelines and a position paper recommending nutritional screening in all cancer patients.⁴ We wanted to reiterate the importance of the topic dealt with by Caccialanza et al and to focus attention on the essential role played by nutritionists in a cancer center, especially in increasing healthcare professionals' awareness of the problem.

We recently carried out an observational pilot study in our cancer institute to bring to light clinical issues in nutritional screening. The study represented a starting point for developing strategies to improve the nutritional care of our patients. Between May 2019 and July 2019, our clinical nutritionists and dietitian analyzed nutritional parameters in the medical charts of patients on a weekly basis. We only included patients referred to our center with a diagnosis of head and neck or gastrointestinal cancer as these are the sites of disease considered to be at higher risk of malnutrition due to their localization and the side-effects of anticancer treatments.⁵

This pilot project was carried out in collaboration with oncologists to increase cooperation between the institute's healthcare professionals who have to respond to the nutritional needs of

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Table 1
Primary tumor and MUST score.

	Total	Primary tumor site								
		Gastrointestinal tract	Colon-rectum	Stomach	Pancreas	Bile duct	Head and neck	Oral cavity	Nasopharynx	Larynx
No. patients	51	47	31	6	9	1	4	1	1	2
MUST score	31	30	19	4	6	1	1	1	0	0
0	10	10	6	2	1	1	0	0	0	0
1	8	7	7	0	0	0	1	1	0	0
≥ 2	13	13	6	2	5	0	0	0	0	0

MUST, Malnutritional Universal Screening Tool.

patients in accordance with their specific role. The oncologists were invited to evaluate important nutritional parameters such as height and weight, involuntary weight loss in the previous 3-6 months, and the presence of acute disease that led or could lead to no nutritional intake for >5 days, and to record the information in patients' clinical charts.

The goal of the nutrition experts was to calculate the body mass index, involuntary weight loss percentage and, finally, the Malnutrition Universal Screening Tool (MUST) score of the cohort to identify patients at risk of malnutrition who needed a nutritional visit. We chose the MUST score because it is a validated, rapid and simple screening tool that can be used by healthcare providers with no nutritional expertise.⁶

During the study period the medical charts of 51 patients with gastrointestinal or head and neck cancer were evaluated, and the MUST score was calculated in 31 (60.8%) cases (30 with gastrointestinal tumors and 1 with head and neck cancer). Ten (19.6%) patients had a low risk of malnutrition (MUST score = 0), 8 (15.7%) a moderate risk (MUST score = 1), and 13 (25.5%) a high risk (MUST score ≥ 2), the majority having gastric or pancreatic cancer (50% and 83.3%, respectively). These data further highlight the importance of nutritional screening in patients with cancers of the upper gastrointestinal tract, as reported in the literature.⁵ Details on primary tumor site and MUST score are reported in Table 1.

It was not possible to calculate the MUST score in 20 (39.2%) of the 51 medical charts evaluated due to the lack of required parameters. Specifically, height, current weight, and pre-morbid weight were missing in 8 (40.0%) charts, pre-morbid weight had not been included in 10 (50.0%) charts, and height was missing in 2.

Although head and neck cancers are associated with a higher malnutrition risk, only a few cases were involved in our pilot project. However, we were able to assess the percentage of involuntary weight loss in 2 (50%) of the head and neck patients (>10% in both cases.) Thus, while it was not possible to calculate the MUST score, our data highlighted that there was already important weight loss at the time of diagnosis,⁷ 14 (27.5%) of the 51 patients evaluated were referred for a consultation with the clinical nutritionists, 9 of whom had a MUST score ≥ 2 .

Although our results do not permit us to draw any definitive conclusions, the overall pilot project confirmed that only a few oncologists measured weight and probably considered cancer-related weight loss unimportant, as pointed out in the European Cancer Patient Coalition study.¹ However, our findings prompted us to form a "nutritional team" to enhance cooperation between nutritional experts, oncologists, and palliative care specialists. This team will collaborate with the Territorial Nutritional Unit to guarantee continuity of care and will work directly with the physicians of the institute, creating a shared clinical pathway to increase awareness and understanding about nutrition and ultimately improve nutritional support for our patients.

We agree with Caccialanza et al on the importance of developing specific regional and national shared care protocols, as well as educational programs to improve nutritional support management in cancer patients. Further collaborative research is also needed to answer the many open questions remaining in this important area.

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