

## Cartas científicas

# Subjective aspects of the nutritional status and length of chemotherapy treatment in patients with neoplasias

M.<sup>a</sup> R. Marques de Oliveira<sup>1</sup>, K. C. Pagotto Fogaça<sup>2</sup>, M. Escobar Gimenes Perencin<sup>3</sup> and V. A. Leandro Merhi<sup>4</sup>

<sup>1</sup>Professora Doutora do Instituto de Biociências. UNESP. Botucatu-SP-Brasil. <sup>2</sup>Professora Doutora do Curso de Nutrição. Unimep. Piracicaba-SP-Brasil. <sup>3</sup>Nutricionista. Curso de Nutrição. Unimep. Piracicaba-SP-Brasil. <sup>4</sup>Professora Doutora da Faculdade de Nutrição. PUC-Campinas-SP-Brasil.

## Senor Director:

The methodologies that take into account subjective aspects of the nutritional status have the advantage of considering the factors that impair food intake, identifying the individuals at risk. Factors such as type of tumor and duration of treatment have been considered in these assessments.<sup>1</sup> The objective of this paper was to assess the relationship between type of tumor, duration of treatment and changes in food intake and the subjectively assessed nutritional status of individuals undergoing chemotherapy. The cross-sectional study was done with 86 patients undergoing chemotherapy. The nutritional status was classified by the Subjective Global Assessment<sup>1,2</sup> adapted for individuals with neoplasia as it investigates tumor location, length of chemotherapy treatment and changes in food intake.

According to the SGA,<sup>1</sup> the nutritional status of 50% of the patients of both genders was compromised to some degree. Digestive tract tumors were the most prevalent among the studied patients. There was no difference ( $p = 0.115$ ) between the subjectively assessed nutritional status and tumor location. Regarding duration of chemotherapy and nutritional status, a mean treatment time of  $11.3 \pm 14.3$  months was observed among those whose nutritional status was satisfactory,  $9.5 \pm 8.1$  months among those at risk of malnutrition and  $4.1 \pm 3.5$  months among the malnourished individuals (fig. 1). Therefore a higher prevalence of malnutrition in the first months of treatment is confirmed when the difference between medians is tested since these data do not present Gaussian distribution ( $p = 0.045$ ).

Half of the population was at risk of malnutrition or malnourished. There was a greater prevalence of malnutrition and negative changes in food intake patterns in the first months of chemotherapy. These results reinforce the need to pay special attention to the diet of

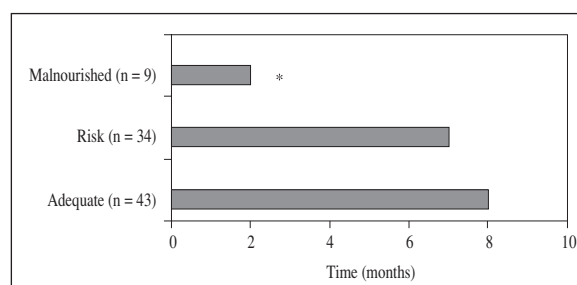


Fig. 1.—Duration of chemotherapy (median in months) and nutritional status of individuals with neoplasia being treated at an Oncology Center ( $p < 0.045$  Anova-Kruskal Wallis, followed by the Dunn test).

patients undergoing chemotherapy and that this care should be instituted early in routine patient care. The median treatment duration of malnourished individuals in this study was 2 months, representing one fourth of the treatment duration of the other patients (fig. 1).

The variety of tumors, drugs and dosages used in chemotherapy do not allow us to try to explain our results regarding the more compromised nutritional status at the beginning of treatment. A hypothesis to be tested is that individuals who have been under chemotherapy for more time present better general conditions which allow them to remain more time under treatment. At the beginning of chemotherapy, the subjectively assessed nutritional status is more compromised.<sup>2,3,4</sup> At this time, the food intake pattern is also more affected.

## References

- Ottery FD. Definition of standardized nutritional assessment and interventional pathways in oncology. *Nutrition* 1996; 12: S15-S19.
- Detsky AS, McLaghlin JR, Baker JP. What is subjective global assessment? *J Parent. Ent Nutr* 1987; 11 (1): 8-14.
- Gupta D, Lammertsfeld CA, Vashi PG, Burrows J, Lis CG, Grutsch JF. Prognostic significance of subjective global assessment (SGA) in advanced colorectal cancer. *Eur J Clin Nutr* 2005; 59: 35-40.
- Hutton JL, Baracos VE, Wismer WV. Chemosensory dysfunction is a primary factor in the evolution of declining nutritional status and quality of life in patients with advanced cancer. *J Pain Symptom Manage* 2007; 33 (2): 156-165.

**Correspondence:** Vânia A. Leandro-Merhi.  
Av. Carlos Grimaldi, 1171, Quadra D, Lote 13.  
Bairro: Jardim Madalena.  
Residencial Vila Verde.  
13091-906-Campinas-SP.  
E-mail: valm@dglnet.com.br

Recibido: 17-IX-2009.  
Aceptado: 14-XI-2009.