Home artificial nutrition in advanced cancer patients

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ABSTRACT

Aims and background. Malnutrition is over 50% in advanced cancer patients and is related to a decreased survival. Cachexia is the first reason for death in 4-23% of cases. The aim of the study was to estimate the appropriateness of the criteria to select patients for home artificial nutrition and its effectiveness to avoid death from cachexia and to improve quality of life in patients with advanced cancer assisted at home by the National Tumor Association (ANT) Foundation.

Methods and study design. The criteria for patient selection are: inadequate caloric intake ± malnutrition; life expectancy ≥6 weeks; suitable psycho-physical conditions; informed consent. The measured parameters were sex, age, tumor site, food intake, nutritional status, Karnofsky performance status, indication for home artificial nutrition, type of home artificial nutrition (enteral or parenteral), and survival after starting home artificial nutrition.

Results. The ANT Foundation assisted 29,348 patients in Bologna and its province from July 1990 to July 2012. Home artificial nutrition had been submitted to 618 patients (2.1%): enteral to 285/618 (46.1%) and parenteral to 333/618 (53.9%). Access routes for home artificial nutrition were: 39% nasogastric tube, 26% percutaneous endoscopic gastrostomy, 33% digiunostomy, and 2% gastrostomy. The central venous catheters used for home artificial nutrition were: 61% non-tunneled, 13 peripherally inserted, 8% partially tunneled, and 18% totally implanted. By July 2012, all the patients had died. Duration of life ≥6 weeks was 78% (484/618). Karnofsky performance status was related to survival (P <0.0001): one month after starting home artificial nutrition, it decreased in 73 patients (12%), was unchanged in 414 (67%), and increased in 131 (21%).

Conclusions. The low incidence of home artificial nutrition over all the patients assisted by the ANT Foundation and the achievement to avoid death from cachexia in 78% prove the efficacy of the criteria of patient selection in order to prevent its excessive and indiscriminate use. It was effective in maintaining and improving the performance status in 88% of patients. Karnofsky performance status is a reliable prognostic index to start home artificial nutrition.