Nutritional status and food intake in nine patients with chronic low-limb ulcers and pressure ulcers: importance of oral supplements.

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OBJECTIVES: Chronic low-limb ulcers and pressure ulcers are a serious and costly issue. Malnutrition is a risk factor. Searching for intervention strategies in elderly patients referred for surgical closure of their ulcers, the trial aimed at investigating the micronutrient status, determining the food intake of such patients, and the role of oral liquid supplements.

METHODS: Observational cohort study in 9 patients, starting 5 days prior to surgery until day 10 after surgery. Variables: body mass index (BMI), food intake assessed using standardized meals (energy target 25 kcal/kg/day). Oral liquid supplements were provided between meals. Laboratory: blood count, plasma proteins, antioxidant status, vitamins, Fe, Se, and Zn.

RESULTS: The patients were aged 71 +/- 10 y (mean +/- SD), with a BMI of 23.3 +/- 3.3. Baseline blood samples showed anemia and strong inflammation in 4 patients: albumin, retinol, and selenium were low; iron and zinc were very low. Food intake was largely variable and covered only about 76% (31-95%) of energy requirements. Breakfast provided 225 +/- 110, lunch 570 +/- 215, and dinner 405 +/- 150 kcal. Supplements were willingly consumed covering 35 +/- 12% of energy target. While vitamin supply was adequate, selenium and zinc requirements were not met.

CONCLUSIONS: Most patients with chronic skin ulcers suffered micronutrient status alterations, and borderline malnutrition. Meals did not cover energy requirements, while oral supplements covered basic micronutrient requirements and compensated for insufficient oral energy and protein intakes, justifying their use in hospitalized elderly patients.

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