

How important is malnutrition? A prospective study in internal medicine

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OBJEKTIVE

Data about the prevalence of malnutrition on hospital admission vary and follow up data are scarce. We assessed the nutritional status of unselected patients on admission and discharge.

DESIGN

Prospective observational study.

SETTING

Internal medicine of a medium-sized teaching hospital in Switzerland.

METHODS

430 consecutively admitted patients were assessed and 168 patients hospitalized ≥ 6 days were reassessed on discharge. Assessment was done by the Mini Nutritional Assessment (MNA), weight and anthropometric measurements, bioelectrical impedance analysis, biochemical markers and a subjective clinical assessment by the physicians in charge.

RESULTS

On admission, 47% of all patients were overweight (BMI > 25 kg/m²) and 8% underweight (BMI < 18.5 kg/m²). In terms of the MNA 70% were adequately nourished, 20% at risk for malnutrition, and 10% malnourished. By clinical judgement alone 18 (4.3%) malnourished patients according to MNA were missed. The 44 malnourished patients according to the MNA had significantly lower values for BMI, fat free mass, fat mass, waist circumference, triceps skin fold thickness, hemoglobin, albumin, prealbumin, total cholesterol but higher values for CRP. Of the 168 patients staying ≥ 6 days in hospital, 57% lost and 39% gained weight. Only 1.9% of all patients (8 of 430) was malnourished and lost further weight during hospitalization.

CONCLUSIONS

We found a low prevalence (10%) of malnourished patients on admission. Clinical judgement and to some extent anthropometrical measurement were helpful for assessing the nutritional status, laboratory values were not.