

PEDIATRIC CANCER PATIENTS:NUTRITIONAL SCREENING AND ASSESSMENT AT DIAGNOSIS

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BACKGROUND AND AIMS: Pediatric oncologic patients frequently present compromised nutritional status at diagnosis, reducing treatment tolerance and negatively influencing thrive. Literature data are not homogeneous, reporting a wide range of malnutrition prevalence and a variety of nutritional assessment tools.

METHODS: consecutive patients aged 0-18, attending our Pediatric Oncology Unit since 10/2020 to 08/2021 were included. Patients' baseline characteristics, anthropometric data (WHO 0-24mts, CDC 2-20ys Charts) and STRONGkids and SGNA scores have been collected. Agreement (Cohen's kappa or weighted Cohen's kappa) between SGNA (not, moderately, severely malnourished) and anthropometric data (not, moderately, severely malnourished for scores $>-2/\leq 2$, $\leq -2/>-3$, and ≤ -3 , respectively) have been evaluated.

RESULTS: 32 patients (M 17; F 15), with different diagnosis (31% bone/soft tissue sarcoma, 69% central nervous system tumors) were recruited, with a median age of 7.7ys (range 0.25-16). STRONGkids was positive in all patients (72% moderate, 28% high). According to anthropometric data, 25% of patients were malnourished (25% of which severely malnourished); according to SGNA 40.6% of pts were malnourished (7% of which severely malnourished). No agreement was observed between anthropometric data and SGNA (all kappa <0.4).

CONCLUSIONS: pediatric cancer patients are at risk of malnutrition due to the oncologic diagnosis according to STRONGkids, therefore early nutritional assessment is mandatory. In our limited sample size, SGNA seems able to detect more and/or different cases of malnutrition than anthropometric data, probably because it considers some clinical aspects (gastrointestinal symptoms, functional condition) influencing nutritional status. At the start of oncologic treatment, this simple-to-use tool should be recommended for a timely and adequate intervention.