**ABSTRACT**

**Background:** Children and infants with chronic liver disease are at high risk for developing malnutrition. Although there are now several available methods to assess malnutrition, a standardized simple and accurate method for evaluating malnutrition in liver disease remains a challenge.

**Aim of work:** To assess the nutritional status of hospitalized infants and children with liver disease and study its relation to the prognosis of these patients.

**Methods:** We conducted a prospective cohort study for all cases who were admitted in the Pediatric Hepatology Unit in Cairo University Pediatric Hospital from the beginning of November 2013 to the end of April 2014. All patients were subjected to nutritional history taking, clinical examination including anthropometric measurements (head circumference, weight, length/height, weight for length/height, body mass index, percentage of ideal body weight, triceps, subscapular skin folds thickness, mid upper arm circumference and upper arm muscle area by height) and basic laboratory tests.

**Results:** Our study included 59 cases. The median age of the patients was 8.5 months with IQR (44.5). 41 patients (69.5%) had cholestatic disorders of infancy. Anthropometric measurements showed that 21 patients (35.6%) were underweight, 29 patients (49.2%) were stunted and 6 patients (10.2%) were wasted by weight for length/height percentile. 35 patients (59.4%) had triceps skin fold below 5th percentile. 39 patients (66.1%) had subscapular skin fold below 5th percentile. 33 patients (56%) had mid upper arm circumference below 5th percentile. 25 patients (42.3%) developed complications. We found no difference in the prognosis by using anthropometric measurements in nutritional assessment. We found a positive correlation between triceps skin fold thickness as a nutritional index and a longer hospital stay in 31.4% of malnourished patients versus 11.1% in non malnourished patients (P value> 0.01).

**Conclusion:** Infants and children with chronic liver diseases had a significant degree of malnutrition. Although wecould not found a strong relation between the anthropometric measurements and prognosis of our patients, anthropometric measurements were useful in evaluation of the nutritional status of these patients.

**Key words:** Anthropometry, nutritional assessment, pediatrics, malnutrition, hospitalized and liver disease.