

## Topic Area: Clinical Research (Including Outcomes of Intervention)

### Abstract Title

Malnutrition, hepatic encephalopathy and quality of life: associations in chronic liver disease

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### Abstract

**Introduction:** Malnutrition is a frequent complication in patients with chronic liver disease (CLD) and increases the risk of developing hepatic encephalopathy (HE) and affects quality of life (QOL). Strategies focusing on nutritional status and complications of CLD are an unmet clinical need.

**Objectives:** 1) Assess nutritional status and its relationship to QOL; 2) Ascertain the presence, severity and history of HE; 3) Inquire the relationship of HE and QOL.

**Methods:** Cross-sectional study involving 50 patients from the CHUM's Liver Unit, Montreal, Canada and 18 non-cirrhotics. All subjects were assessed for: 1) Nutritional Status (SGA); 2) QOL (SF-36; 8 scales); 3) HE (EncephalApp Stroop test or CHESS).

**Results:** 50 CLD patients (72% men) of various etiologies (18% NASH, 12% alcoholic, 8% autoimmune, 6% viral, 12% others and 44% mixed etiologies), aged 56±12 years and 18 non-cirrhotic patients (33% male, aged 42±15). SGA revealed that 34% of CLD subjects were malnourished. Among malnourished CLD patients, 18% were diagnosed with HE. CLD malnourished patients had a lower perception of QOL than well-nourished CLD patients for all SF-36 scales (p<0,01). History of HE was associated with poor QOL (p<0,01). Compared to controls, CLD patients displayed a lower score in QOL (p<0,05).

**Conclusion:** Our data suggest that a suboptimal nutritional status based on SGA negatively affects 6 scales out of 8 of QOL but is not associated with presence of HE. However, history of HE does impact 2 scales of QOL. Identifying malnourished CLD patients is of great importance to improve QOL.

**Significance to the Field of Dietetics:** Results of this study will pave the way to future strategies urgently needed for patients with chronic liver disease and guide dietitians to optimize their interventions.