

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

C Pincinbono-Larose^{1,2}, A Lamoussenerie^{1,2}, M Tremblay¹, C Vincent³, G Huard³, CF Rose¹, C Bémeur^{1,2}

¹Hepato-Neuro Lab, CRCHUM, Montréal, Canada; ²Département de nutrition, Université de Montréal, Canada;

³Département d'hépatologie, CHUM, Montréal, Canada

Background - Malnutrition

- Important prognostic factor potentially influencing clinical outcome of patients with chronic liver disease (CLD; cirrhosis)
- May increase the risk of developing other complications including hepatic encephalopathy (HE)
- May affect patients' health-related quality of life (HRQOL)

Hypothesis

Sub-optimal nutritional status in cirrhotic patients increases the risk of developing HE and decreases HRQOL

Aim

Examine the impact of nutritional status on HRQOL and HE in cirrhotic patients

Methods

- Hospitalized and outpatients (n=50) and non-cirrhotic patients (n=18) from CHUM's Liver Unit
- Assessments:
 - Nutritional status (Subjective Global Assessment; SGA)
 - HRQOL (SF-36 questionnaire)
 - HE (Medical chart)
 - Biochemistry (Medical chart)

Discussion/Conclusion

- Poor nutritional status negatively affects HRQOL in CLD patients but is not associated with HE
- History of HE episode(s) does impact HRQOL
- Small sample size limits the analysis of confounding factors
- Identifying malnourished cirrhotic patients is of great importance and interventions for treating malnutrition in CLD remain an unmet need

Table 1. Demographic, laboratory and nutritional status characteristics and outcomes

	Cirrhotics (n=50)	Non-cirrhotics (n=18)	p
Demographics			
Gender (M/F) (%)	72/28	33/66	0,004
Age (yr)	58 (52-63)		0,004
Laboratory data			
AST	63 (38-86); 46	22 (16-28); 11	0,001
ALT	42 (24-68); 47	21 (16-28); 16	0,025
ALP	102 (75-122); 47	59 (48-75); 16	0,002
Total bilirubin	35,9 (21,7-51,6); 47	10,9 (7,6-15,8); 16	0,0001
Prothrombin time INR	1,3 (1,2-1,6); 47	1,0 (1,0-1,0); 13	0,0001
Nutritional status			
Well-nourished/Malnourished (%)	66/34	72/28	0,628

Table 2. Clinical characteristics of cirrhotic patients

	Cirrhotics (n=50)
Etiology of CLD (%)	
• ROH/Viral/NASH/Autoimmune (AI)/Mixed etiologies/Others	12/6/18/8/44/12
Child-Pugh	
• A/B/C/Unknown	15/7/18/10
Diagnosis of HE at time of assessment (%)	12%
History of HE (%)	37%

Figure 1. Cirrhotic malnourished patients have decreased HRQOL compared to well-nourished patients (p<0.01)



Figure 2. Cirrhotic patients with a history of HE showed decreased physical functioning (PF) (p=0.024) and role limitations due to physical health (RLPH) (p=0.002)

