Diet Satisfaction and Adequate Food Intake in Patients with Chronic Liver Diseases

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Objectives: To describe relationships between diet satisfaction, ability to eat, and CLD.

Methods: Data collected from 354 patients with CLD was used for this analysis, including 2 items from the validated Chronic Liver Disease Questionnaire (CLDQ): item 7 "ability to eat as much as you like" (EA), and item 14 "bothered by a limitation of your diet" (SWD). Results were stratified by existing diagnosis (Cirrhosis and all-type Hepatitis) and severity of disease [Childs-Pugh score (CP-A, mild; CP-B, moderate; CP-C, severe)]; AST (abnormal > 40 U/L) and ALT (abnormal > 55 U/L). Ordinal Logistic Regression, with odds and likelihood ratios, modeled disease severity CP A-C; general linear models examined EA and SWD. All models adjusted for age and sex.

Results: 354 CLD patients were included [mean age 50.4y (\pm 11.2); 51% male; 222 cirrhosis; 145 hepatitis; 135 with abnormal AST; 131 abnormal ALT; 100 had CP score A; 83 CP-B; 38 CP-C] Of those

included, 31% (n = 110) reported low EA (EA-L), and 25% (n = 88) reported low SWD (SWD-L). In patients with cirrhosis, 36% (n = 80) reported EA-L, and 33% (n = 73) SWD-L. 30% (n = 43) of patients with hepatitis reported EA-L, and 22% SWD-L. 33% (n = 45) of patients with abnormal AST reported EA-L, 30% (n = 41) SWD-L; 40% (n = 52) of those with abnormal ALT reported EA-L, 35% (n = 46) SWD-L. 50% (n = 19) with CP-C had EA-L, 63% (n = 24) SWD-L. 43% (n = 36) with CP-B had EA-L, 39% (n = 32) SWD-L. 25% (n = 25)with CP-A had EA-L, 17% (n = 17) SWD-L. Worsening CP scores were 22.68x (p = .0004) more likely associated with EA-L; the odds of patients with CP-C reporting EA-L was 3.3x greater compared normal CP. Similarly, worse CP scores were 56.99x (p < .0001) more likely associated with SWD-L; odds of patients with CP-C reporting SWD-L were 16.2x greater compared to normal. EA described 23% of variance in SWD (p < .0001), and SWD explained 25% of the variance in EA (p < .0001). Sex was significantly associated with SWD (0.55 \pm 0.2, p < .0001), age was not. Neither were significant for EA.

Conclusions: EA-L and SWD-L strongly relate to worsening disease severity as documented by CP scores. Diet satisfaction and ability to eat as much as you like should be monitored closely for patients with CLD, especially those with cirrhosis because these symptoms signal loss of lean mass—a health risk, and one that may preclude eligibility for life-saving liver transplantation.

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