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IMPACT OF INTENSIVE ENTERAL NUTRITION IN ASSOCIATION WITH CORTICOSTEROIDS IN THE TREATMENT OF SEVERE ALCOHOLIC HEPATITIS : A MULTICENTER RANDOMIZED CONTROLLED TRIAL. C. Moreno (1), E. Trepo (1), A. Louvet (2), D. Degré (1), B. Bastens (3), A. Hittelet (4), M. Piquet (5), W. Laleman (6), H. Orlent (7), L. Lasser (8), T. Sersté (9), P. Starkel (10), X. Dekoninck (11), S. Negrin (12), J. Delwaide (13), I. Colle (14), C. De Galocsy (15), S. Francque (16), P. Langlet (17), V. Putzeys (18), H. Reynaert (19), T. Gustot (1), P. Deltenre (20). (1) CUB Hôpital Erasme, Brussels, Belgium, Department of Gastroenterology, Hepatogastroenterology and Digestive oncology ; (2) Centre Hospitalier Régional Universitaire de Lille, Hôpital Claude Huriez, Lille, France, Service des Maladies de l'Appareil Digestif ; (3) Hôpital Saint-Joseph, Liège, Belgium, Department of Gastroenterology ; (4) Hôpital Ambroise Paré, Mons, Belgium, Department of Gastroenterology ; (5) CHU de Caen, Caen, France, Service d'Hépatogastroentérologie ; (6) University Hospitals Leuven, Leuven, Belgium, Department of Liver and Biliopancreatic Disorders ; (7) AZ Sint-Jan Brugge-Oostende, Brugge, Belgium, Department of Gastroenterology and Hepatology ; (8) CHU Brugmann, Brussels, Belgium, Department of Hepatogastroenterology ; (9) CHU Saint-Pierre, Brussels, Belgium, Department of Hepatogastroenterology ; (10) UCL, Cliniques Universitaires Saint-Luc, Woluwe-Saint-Lambert, Belgium, Department of Gastroenterology ; (11) Hôpital Saint-Pierre, Brussels, Belgium, Department of Gastroenterology ; (12) Hôpital Saint-Joseph, Liège, Belgium, Department of Gastroenterology ; (13) CHU Sart Tilman, Liège, Belgium, Department of Hepatogastroenterology ; (14) UZ Gent, Gent, Belgium, Department of Hepatogastroenterology ; (15) Hôpitaux Iris Sud Bracops, Brussels, Belgium, Department of Gastroenterology ; (16) UZ Antwerpen, Edegem, Belgium, Department of Gastroenterology and Hepatology ; (17) CHIREC-Site Cavell, Uccle, Belgium, Department of Gastroenterology ; (18) CHR La Citadelle, Belgium, Department of Gastroenterology ; (19) UZ Brussel, Jette, Belgium, Department of Hepatogastroenterology ; (20) Hôpital de Jolimont, Haine-Saint-Paul, Belgium, Service d'Hépatogastroentérologie.

Introduction : Severe alcoholic hepatitis (AH) is associated with a high risk of short-term mortality. Although adequate nutritional support is recommended in these patients, the recommended protein-caloric intake is often difficult to achieve orally in this population.

Aim : Our objective was to evaluate the impact of intensive enteral nutrition in addition to steroid therapy on 6-month survival in patients with severe AH.

Methods : This multicenter randomized, controlled trial was performed in 18 Belgian and 2 French hospitals. Two groups were included : 1) intensive enteral nutrition and methylprednisolone (intensive group) or 2) conventional nutrition and methylprednisolone (control group). In the intensive group, enteral nutrition was given using a feeding tube for 14 days and patients received Fresubin HP Energy® (1.5 kcal/ml, 7.5 g prot/100 ml) as it follows : 1L/day if body weight (BW) < 60 kgs, 1.5L if BW between 60 and 90 kgs, 2L if BW > 90 kgs. Nutrition intake was recorded for 14 days in both groups.

Results : A total of 136 patients with a severe biopsy-proven AH (Maddrey discriminant function [mDF] \geq 32) were randomized, 68 in each group. At baseline, there were no significant difference between the two groups (intensive vs. control) for age (49.5 ± 8.7 vs. 51.5 ± 8.6), male gender (69.1 vs. 58.8%), bilirubin (13.3 [8.9-23.5] vs. 11.9 [6.9-21.5] mg/dL), INR (1.8 [1.6-2.1] vs. 1.8 [1.6-2.1]), mDF (52.3 [40.9-70.2] vs. 54 [42-68.5]) and MELD score (22.8 [21.4-26.3] vs. 22.4 [20.2-25.1]). Mean kcal intake was 2206 ± 754 vs. 1754 ± 656 kcal/day ($p = 0.001$) and mean protein intake was 106 ± 37 vs. 80 ± 32 g/day ($p < 0.001$). In intention-to-treat (ITT) analysis, 6-month survival was not statistically different between the two groups : 55.9 vs. 47.0% ($p = 0.316$). In the intensive group, 43/68 (63.2%) patients received at least 80% of the planned kcal intake defined by the protocol, and were considered in the per-protocol analysis. In per-protocol analysis, 6-month survival was higher in the intensive group : 69.8 vs. 46.8% ($p = 0.015$). In addition, mean kcal intake/kg/day > 26.4 (median value) was associated with a higher 6-month survival (68.3 vs. 42.4%, $p = 0.002$). In ITT multivariable analysis, a mean kcal intake/kg/day > 26.4 , age, baseline serum sodium, baseline MELD and the Lille scores remained independently associated with 6-month survival.

Conclusions : Intensive enteral nutrition by feeding tube does not improve 6-month survival in patients with severe AH. However, adequate nutritional support is associated with a better short-term prognosis. Adequate nutritional intake should be targeted in AH patients treated with corticosteroids.