

levels (116 vs. 38 IU/L, $p<0.001$), higher ALT levels (125 vs. 54 IU/L, $p=0.004$), lower haemoglobin levels (108 vs. 137 g/dL, $p<0.001$), lower platelets count (208,000 vs. 248,000/mm³, $p=0.05$), more frequent associated conditions (15 [79%] vs. 85[41%], $p=0.003$), and more frequent severe associated conditions (14 [74%] vs. 41 [20%], $p<0.001$). Independent predictors of death were age (relative risk [RR]: 1.07, 95% CI: 1.03, 1.11, $p<0.001$) and presence of a severe associated condition (RR: 4.76, 95% CI: 1.55–14.65, $p=0.006$). The 10-year survival rate was 84% (95% CI: 77–92%): 95% (95% CI: 89-100) in patients without an associated condition, 100% in patients with a non-severe associated condition, and 58% (95% CI: 41-76) in patients with a severe associated condition ($p<0.001$).

Conclusions: Most patients with PSVD who did not present with PH will not develop it. Sixteen per cent of patients die within 10 years, mostly from non-hepatic causes, and the risk of death is independently associated with the severity of the associated condition.

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CORTICOSTEROIDS ARE INEFFECTIVE IN INDIVIDUALS WITH SEVERE ALCOHOL-ASSOCIATED HEPATITIS AND EARLY SPONTANEOUS IMPROVEMENT: A MULTICENTRE BELGIAN RANDOMIZED PLACEBO-CONTROLLED TRIAL. C. Moreno (1), P. Deltenre (2), A. Marot (3), H. Njimi (4), L. Lasser (5), D. Degré (6), A. Hittelet (7), J. Delwaide (8), A. Geerts (9), S. François (10), B. Bastens (11), T. Gustot (6), E. Trépo (6) / [1] Erasme Hospital, Brussels, Belgium, Department of Gastroenterology and Hepatopancreato, [2] Clinique Saint-Luc Bouge ; CHU UCL Namur ; CUB Hôpital Erasme, Belgium, Department of Gastroenterology and Hepatology, [3] CHU UCL Namur, Yvoir, Belgium, Department of Gastroenterology and Hepatology, [4] Erasme University Hospital - Université Libre de Bruxelles (ULB), Bruxelles, Belgium, Biomedical statistics, [5] CHU Brugmann, Brussels, Belgium, Department of Hepatogastroenterology, [6] Erasme University Hospital - Université Libre de Bruxelles (ULB), Bruxelles, Belgium, Department of Gastroenterology, Hepatopancreatology and Digestive Oncology, [7] CHU Ambroise Paré MONS, Mons, Belgium, Department of Gastroenterology, [8] CHU Liege, Liège, Belgium, Department of Hepatogastroenterology, [9] Ghent University Hospital, Gent, Belgium, Belgium, Department of Hepatogastroenterology, [10] University Hospital Brussels, Vrije Universiteit Brussel, Belgium, Department of Hepatogastroenterology, [11] Clinique MontLégia- CHC Groupe Santé, Liège, Belgium, Department of Gastroenterology.

Introduction: Severe alcohol-associated hepatitis (AH) is a life-threatening disease for which corticosteroid therapy is recommended in the absence of contraindication. A significant proportion of patients with severe AH have a spontaneous serum bilirubin decrease early after admission. **Aim:** Our aim was to determine whether corticosteroid therapy is more effective than placebo in individuals with severe AH and early spontaneous improvement.

Methods: In this multicentre, randomized, controlled trial conducted between February 2018 and May 2024 in 10 Belgian hospitals, patients aged 18 or older, who were heavy drinkers, with recent onset of jaundice, with a biopsy-proven severe AH (mDF³32 at admission), and with a spontaneous early improvement (i.e. serum bilirubin level decrease > 10% at day 5-10 after admission) were randomized to either corticosteroids (CS) (methylprednisolone 32 mg/d) or placebo (P) for 28 days. Primary endpoint was to compare 3-month mortality rate between both groups of treatment. Secondary endpoints were to compare 1-month mortality rate and infection rate during study period between both groups.

Results: A total of 69 patients were randomized, 38 in the corticosteroid group and 31 in the placebo group. Baseline characteristics were not significantly different between the two groups (CS vs P) for age (52 ± 8 vs. 51 ± 10), male gender (76% vs. 63%), total bilirubin ($7.4[5.1-10.8]$ vs. $9.3[6.0-17.6]$ mg/dL), INR ($1.64[1.48-1.80]$ vs. $1.70[1.48-1.98]$), mDF at admission ($44[37-57]$ vs. $45[40-58]$) and MELD score ($21[19-23]$ vs. $21[19-24]$). Decrease in bilirubin level between admission and screening was not different between both groups ($31\pm 15\%$ vs. $27\pm 11\%$). Lille score at day 7 of treatment was $0.18[0.07-0.30]$ and $0.18[0.07-0.40]$ in CS and P group, respectively ($p>0.9$). At 3 months, the probability of survival was not different between both groups ($83[72-96]$ vs. $82[69-98]\%$ in CS and P groups respectively, $p=0.88$). There was no difference in the probability of 1-month survival between CS and P groups ($95[88-100]$ vs. $94[85-100]\%$, $p=0.85$). Probability of infection during the study period was 48 % in the CS group and 36 % in the P group ($p=0.41$). Age and Lille score were significantly associated with 3-month survival. The study was prematurely interrupted due to a low recruitment rate.

Conclusions: The present study failed to identify any benefit from corticosteroid therapy in patients with severe AH and early decrease in bilirubin level after admission. Even if the number of included patients initially planned was not reached, it is unlikely that corticosteroids provide a survival benefit when bilirubin

level spontaneously decreases by at least 10%. Waiting five days after admission before deciding to start steroids seems to be a reasonable strategy.

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SERUM GLYCOMICS AT ADMISSION PREDICT LIVER TRANSPLANT-FREE SURVIVAL IN PATIENTS WITH ACETAMINOPHEN-INDUCED ACUTE LIVER FAILURE. L. Grossar (1), N. Somers (2), E. Butaye (3), N. Debusschere (1), T. Vanwolleghe (4), G. Dahlqvist (5), J. Delwaide (6), J. Verbeek (7), L. Devisscher (1), S. Lefere (1), L. Meuris (3), N. Callewaert (3), S. Raevens (8), A. Geerts (8), H. Van Vlierberghe (8), X. Verhelst (8) / [1] Ghent University, Ghent, Belgium, Liver Research Centre Ghent, [2] Ghent University Hospital, Ghent, Belgium, Internal Medicine and Paediatrics, [3] VIB, Ghent, Belgium, Centre for Medical Biotechnology, VIB, Ghent, Belgium., [4] UZA, Universitair Ziekenhuis Antwerpen, Edegem, Belgium, Gastroenterology and Hepatology, [5] Cliniques universitaires Saint-Luc, Brussels, Belgium, Brussels, Belgium, Hepatogastroenterology and Liver Transplantation, [6] CHU Liege, Liège, Belgium, Gastroenterology and Hepatology, [7] University Hospitals Leuven (UZLeuven), Leuven, Belgium, Gastroenterology and Hepatology, [8] Ghent University Hospital, Ghent, Belgium, Gent, Belgium, Gastroenterology and Hepatology.

Introduction: Acute liver failure (ALF) is a rare but potentially life-threatening clinical syndrome characterized by hepatocellular damage and impaired liver function, manifesting as jaundice, coagulopathy and hepatic encephalopathy in subjects with no prior pre-existing disease. In those not responding to medical therapy, emergency liver transplantation (ELT) is required to avoid fatal outcome. The decision to list a subject for ELT is based on imperfect prediction rules with strong specificity, but limited sensitivity, thereby providing good ruling-in capacity but unacceptably poor ruling-out performance. A real clinical need exists for biomarkers with strong negative predictive value and fast turnaround-time in order to facilitate decision-making and avoid unnecessary ELT and/or referral to a transplant centre.

Aim: We aimed to assess differences in the total serum N-glycome at admission in subjects with ALF due to acetaminophen (APAP) overdose according to the outcome of emergency liver transplantation. Additionally, we aimed to derive a serum glycomics biomarker able to predict need for emergency liver transplantation.

Methods: We performed a prospective, multicentre study in five liver transplant centres in Belgium, between 2014 and 2024. All participating centres were referral centres for ELT. Decision to perform ELT was based on fulfilment of the King's College Criteria, in conjunction with judgment by the multidisciplinary transplant team. In 91 patients with APAP-related ALF, serum samples were collected within 24 hours of admission for analysis of the total serum N-glycome via DNA sequencing equipment-fluorophore assisted carbohydrate electrophoresis (DSA-FACE). Relative glycan abundancies underwent central log-ratio transformation, before comparison between outcome groups, allowing robust statistical comparison for compositional data. A glycan model to predict occurrence of liver transplantation was derived using elastic net regression, which is a penalized regression model that avoids model overfitting. The optimal cut-off for classification was determined by the Youden index.

Results: Seven out of 91 (7.7%) subjects underwent ELT, with two deaths occurring after liver transplantation. Another five (5.5%) died without undergoing prior ELT, either because an organ was not timely available, or because the procedure was deemed futile. We observed a significant increase of the agalacto, core-fucosylated glycan NGA2F and of the agalacto, core-fucosylated, bisecting glycan NGA2FB (independent samples t-test, p-values 0.0356 and 0.0239, respectively). After elastic net regression, a glycan score predictive of liver transplantation was derived, mainly characterized by a relative increase in undergalactosylation and fucosylation, and by a relative decrease in branched glycans. At the optimal cut-off of 0.0815, this biomarker predicted ELT with a sensitivity of 85.7%, specificity of 73.8%, and a negative predictive value of 98.4%. The area under the receiver operating curve was 0.833 (95% confidence interval: 0.711 – 0.955).

Conclusions: In subjects with APAP-related ALF, a distinct glycomic signature can be determined on serum samples at admission, reliably ruling-out subjects not requiring ELT. Application of this serum biomarker could prevent unnecessary liver transplantation and/or referral to tertiary care, and thus avoid significant morbidity and healthcare cost utilization.

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IMMUNE CHECKPOINT INHIBITOR-INDUCED LIVER INJURY: CORRELATION BETWEEN HISTOPATHOLOGICAL PATTERNS OF LIVER DAMAGE, TREATMENT REGIMENS, AND CLINICAL OUTCOMES. N. Brouwer (1), T. Delay (1), C. Jacobs (2), X. Verhelst (3), A. Geerts (3), H. Van Vlierberghe (4), S. Raevens (4), M. Sacerens (5), A. Hoorens (6) / [1] Ghent University, Ghent, Belgium, Dept. of Diagnostic