more alcohol than the AAH group, 140 g/day vs 112 g/day (P<0.001) respectively. No relationship was observed between T/S ratio and lifetime alcohol use (r=0.02, p=0.85). Additionally, no relationship was noted between T/S ratio and MELD score (r=0.02, p=0.87). Median telomere intensity score (TSI) in liver tissue samples was 718 (±83) in the healthy control group, 561 (±72) in the Alc Cirr group, and 491 (±63) in the AAH group (P=0.008). The significantly decreased telomere length in the AAH group was seen despite subjects being younger than the cirrhosis group (median age 34.1 in AAH, 46.5 in Alc Cirr, and 49.8 in HC).
**Conclusions:** Significantly reduced telomere length was observed in PBMCs and hepatocytes of patients with AAH. These findings suggest global accelerated telomere attrition in AAH rather than an organ-specific phenomenon which may carry diagnostic, prognostic, and therapeutic implications.

- A22 -

BARIATRIC SURGERY POST-LIVER TRANSPLANTATION: A BELGIAN NATIONWIDE STUDY. L. Onghena (1), A. Geerts (2), F. Berrevoet (3), J. Pirenne (4), J. Verbeek (5), E. Bonaccorsi-Riani (6), G. Dahlqvist (7), L. Vonghia (8), O. Detry (9), J. Delwaide (10), S. Lefere (11), Y. Van Nieuwenhove (1) / [1] Ghent University Hospital, Ghent, Belgium, Department for Human Structure and Repair, Department of Gastrointestinal Surgery, [2] Ghent University Hospital, Ghent, Belgium, Department of Internal Medicine and Pediatrics, Hepatology Research Unit, [3] Ghent University Hospital, Ghent, Belgium, Department for Human Structure and Repair, Department of General and Hepatobiliary Surgery and Liver Transplantation, [4] University Hospitals Leuven (UZLeuven), Leuven, Belgium, Department for Abdominal Transplant Surgery and Coordination, [5] University Hospitals Leuven (UZLeuven), Leuven, Belgium, Department of Gastroenterology & Hepatology, [6] Cliniques universitaires Saint-Luc, Brussels, Belgium, Abdominal Transplant Unit, [7] Cliniques universitaires Saint-Luc, Brussels, Belgium, Department of Hepatogastroenterology and Liver Transplantation, [8] Antwerp University Hospital, Edegem, Belgium, Division of Gastroenterology and Hepatology, [9] CHU Liege, Liège, Belgium, Department of Abdominal Surgery and Transplantation, [10] CHU Liege, Liège, Belgium, Department of Hepatogastroenterology, [11] Ghent University Hospital, Ghent, Belgium, Liver Research Center Ghent.

**Introduction:** Weight gain and metabolic dysfunction-associated steatotic liver disease (MASLD) pose a rising graft concern post-liver transplantation (LT). Bariatric surgery (BS) can be considered for post-LT weight gain, although the literature is limited and the long-term outcome still uncertain. We previously reviewed the literature and concluded that timing is crucial when considering BS in a population with liver disease or transplantation.
**Aim:** Our current aim was to describe the demographics, mortality, and effect of BS in a post-LT population.
**Methods:** We conducted a national retrospective analysis in 5 Belgian transplant centres and included 25 patients with a liver transplantation between 1/1/2000 and 31/12/2018 followed by a bariatric procedure between 1/1/2005 and 31/12/2020. 187 LT patients without BS were included for comparison. Clinical, biochemical and outcome data were retrospectively retrieved. Statistical analysis was performed using the t-test, Mann-Whitney U, and Chi2 tests.
**Results:** In our nation-wide sample, 25 patients had undergone BS post-LT, at a median 3.5 (2.1, 5.6) years after LT. Twenty-one (84.0%) patients received a sleeve gastrectomy (SG), 3 (12.0%) a Roux-en-Y gastric bypass (RYGB) and 1 (4.0%) a one-anastomosis gastric bypass. All but one procedure (96.0%) were performed laparoscopically. Patients were predominantly male (72.0%), with a lower age at time of transplantation compared to non-BS population (54.5 vs 60.6, $p < 0.0001$). Transient acute kidney failure (20.0%) was the only short-term complication occurring in more than one patient, all after SG. Weight loss was significant and sustained, with a decrease in BMI from 41.0 ± 4.5 pre-BS to 32.6 ± 5.8 ($p < 0.0001$) 1 to 3 years post-BS and 31.1 ± 5.8 ($p < 0.0001$) 3 to 5 years post-BS. Post-LT pre-BS three (12.0%) patients presented with recurrent and one (4.0%) de novo MASLD, with 100% resolution post-BS ($p = 0.016$). Notable reductions were observed in ALT levels (40.5 ± 28.5 U/L to 27.1 ± 25.1 U/L post-BS, $p = 0.051$) and HbA1c levels (6.9 ± 1.6 to 6.0 ± 1.4 post-BS, $p < 0.0001$). Daily mycophenolic acid intake rose from 1000.0 ± 288.7 mg/day to 1392.8 ± 1619.3 mg/day ($p < 0.0001$), while the dose of ciclosporin decreased from 258.3 ± 91.7 mg/day to 146.0 ± 107.4 mg/day ($p = 0.137$). Three patients were re-transplanted, and eight patients died, of which five (20.0%) due to a non-hepatic malignancy and one (4.0%) due to liver failure. Given the small sample size and relatively high mortality due to competing risks, a statistical analysis of patient or transplant-free survival was not feasible.
**Conclusions:** SG is the favored BS post-LT and has proven to be safe and feasible in a post-LT setting. SG post-LT is a valid treatment for de novo and recurrent MASLD post-LT. Although we report on the largest cohort to date, there is still a need for larger cohorts to examine the effect of BS on graft survival.

- A23 -

SPATIAL MAPPING OF THE FIBROTIC RESPONSE IN A MOUSE MODEL OF ALAGILLE SYNDROME. S. Verhulst (1), F. Hildebrandt (2), L. Sevenants (3), J. Ankarklev (2), L. van Grunsven (1), E. Andersson (3), N. Van Hul (3) / [1] Vrije Universiteit Brussel (VUB), Jette, Belgium, Liver Cell Biology Research Group, [2] Stockholm University, Stockholm, Sweden, Department of Molecular Biosciences, [3] Karolinska Institutet, Karolinska University Hospital, Sweden, Department of Cell and Molecular Biology.