

**Method:** All cDCD older than 70 years were evaluated during normothermic regional perfusion (NRP) and then randomly assigned to dual hypothermic (D-HOPE) or normothermic machine perfusion (NMP).

**Results:** In the period from April 2021 to December 2023, 25 cDCD older than 70 years were considered. In 9 cases (36%) the graft was not considered suitable for liver transplantation: 3 on NRP parameters, 2 on histology, 1 due to hepatic artery thrombosis at procurement, 2 on NMP parameters, and 1 due to machine perfusion technical failure. Sixteen (64%) liver grafts were eventually transplanted. The median donor age was 82 years (IQR: 79–84), being 9 (56%) older than 80. The mean functional warm ischemia was  $39 \pm 15$  minutes. Grafts were randomly assigned to D-HOPE (9 grafts) and NMP (7 grafts). There were no cases of primary non-function, one of the patients (D-HOPE LT) experienced delayed non-function, treated with retransplantation. Four cases of post-reperfusion syndrome (25%, 50% D-HOPE vs 50% NMP group) and 2 cases (12%) of early allograft dysfunction were observed. At a median follow-up of 12 months, no vascular complications were reported. Three patients experienced biliary complications: 2 anastomotic stenosis and 1 biliary fistula. No patients experienced ischemic cholangiopathy. No major differences were found in terms of post-operative hospitalization or complications based on the type of machine perfusion.

**Conclusion:** The implementation of sequential normothermic regional and end-ischemic machine perfusion allows the safe use of very old DCD donor grafts in liver transplantation.

#### SAT-014-YI

##### Bariatric surgery post-liver transplantation: a Belgian nationwide study

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**Background and aims:** 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. Our current aim was to describe the demographics, mortality, and effect of BS in a post-LT population.

**Method:** 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  $41.0 \pm 4.5$  pre-BS to  $32.6 \pm 5.8$  ( $p < 0.0001$ ) 1 to 3 years post-BS and  $31.1 \pm 5.8$  ( $p < 0.0001$ ) 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 ( $40.5 \pm 28.5$  U/L to  $27.1 \pm 25.1$  U/L post-BS,  $p = 0.051$ ) and HbA1c levels ( $6.9 \pm 1.6$  to  $6.0 \pm 1.4$  post-BS,  $p < 0.0001$ ). Daily mycophenolic acid intake rose from  $1000.0 \pm 288.7$  mg/day to  $1392.8 \pm 1619.3$  mg/day ( $p < 0.0001$ ), while the dose of ciclosporin decreased from  $258.3 \pm 91.7$  mg/day to  $146.0 \pm 107.4$  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.

**Conclusion:** SG is the favored BS post-LT and has proven to be safe and feasible in a post-LT setting. BS 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.

#### SAT-015-YI

##### Screening for asymptomatic coronary artery disease in liver transplant recipients: is it time to replace stress echocardiography with coronary CT angiography in selected patients?

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**Background and aims:** Asymptomatic coronary artery disease (CAD) has been reported in up to 25% of liver transplant (LT) candidates. Pre-LT cardiovascular (CV) work-up is not yet standardized, but in 2022 coronary-CT angiography (c-CT) was proposed by the American Heart Association in pre-LT selected patients (pts). We aimed to compare two CV screening protocols at our large-volume transplant Centre.

**Method:** We enrolled all adult cirrhotic pts who underwent first-LT between 01/2019–12/2022 in our Center. In the first period (2019–2021) echostress (EchoS) was performed in the presence of 3 minor (age 60–64 years, arterial hypertension, non-insulin treated diabetes, BMI  $>29$  Kg/m<sup>2</sup>, CAD family history, active smoking) or 1 major CV risk factors (insulin-treated diabetes, age  $>64$  years, peripheral vascular disease, MASLD). From 1/2022 c-CT was performed with 1 major CV risk factor, and EchoS with 3 minor CV risk factors. Coronary angiography (CATH) was performed in pts with CAD history/symptoms, positive/doubtful non-invasive test or cardiology indication. Follow-up was closed on 31/12/2023.

**Results:** 477 pts were included: 374 (78%) in first period and 103 (22%) in second one. First vs second period: CV risk factors prevalence was similar: age  $>64$  years 26% vs 25% ( $p = 0.9$ ), previous CAD 2% vs 2% ( $p = 1$ ), male sex 74% vs 80% ( $p = 0.2$ ), previous stroke/TIA 2% vs 2% ( $p = 1$ ), diabetes 26% vs 32% ( $p = 0.2$ ), MASLD 10% vs 9% ( $p = 0.8$ ), BMI  $>29$  Kg/m<sup>2</sup> 12% vs 14% ( $p = 0.6$ ), peripheral vascular disease 1% vs 4% ( $p = 0.07$ ), except for CAD family history which was higher in the first