aged 43 years who had OLT for post-HCV cirrhosis and HCC. After 5 months of OLT he had abnormal liver function. Liver biopsy showed moderate ACR and HCV RNA PCR was 1.240.000 IU/ml. we increases TAC dose. 4 weeks later, the patient had high transaminasis. The second liver biopsy showed moderate ACR. The patient had a single injection of methylprednisolone 1.0 gm iv which resulted in normalization of liver enzymes after almost 6 weeks. HCV RNA PCR after 8 weeks increased to 3.715.745 IU/ml. After 10 months, HCV RNA in blood became negative with normal liver function. 3rd Case A male patient aged-54 years who had OLT for HCV cirrhosis and HCC. Perioperative assessment showed Thymoma and subacute thyroiditis. After 6 weeks of OLT. He developed mild increase in transaminases that was clinically-suspected ACR and managed by increasing TAC dose. HCV RNA was 2.372.140 IU/ml which increased to 7.692.310 IU/ml after another 8 weeks. Then the patient developed manifestations of thyrotoxicosis that was treated by anti-thyroid drugs. HCV RNA PCR follow up after 3 months showed no HCV virus. **Conclusion:** Spontaneous clearance of HCV virus after OLT may be preceded by ACR that would enhance immunological mechanisms responsible for viral clearance.

Abstract# P-44

HCV ALLOGRAFT RECURRENCE and LIVER TRANSPLANTATION (LT): THE ROLE OF MIMIMAL TACROLIMUS (TAC) BASED IMMUNOSUPPRESSION (MIS). Eliano Bonaccorsi-Riani, Nicolas Piette, Benoît Kabamba, Olga Ciccarelli, Francine Roggen, Chantal De Reick, Jacques Rahier, Christine Sempoux, Ziad Hassoun, Jan Lerut. *Unit of Abdominal Transplantation, Université Catholique de Louvain - Cliniques Universitaires Saint-Luc, Brussels, Belgium*

AIM: Study HCV allograft recurrence after LT based on induction IS and modality of steroid use.

METHODS AND MATERIAL: During the period 2000-2005, 35 HCV patients were included in a prospective, randomized, double-blind, placebo-controlled study comparing TAC-Placebo (PLAC) (n=14) vs. TAC-short-term (3mo) low-dose steroid (STER)(n=21) use.Liver biopsies were done at d7, 6 mo, 12 mo and then yearly. HCV recurrence was classified following Ludwig (taking into account portal (P), lobular (L) infiltration as well as degree of fibrosis (S) scored from 1 to 4: S1: no fibrosis; S2: beginning fibrosis; S3:fibrosis; S4:cirrhosis). All patients had a complete follow-up of minimal 3 years.

RESULTS: One, 3 and 5 year patient survival rates were 93; 93 and 78% in TAC-PLAC group and 90; 71 and 65% in TAC-STER group. One, 3 and 5 year graft survival rates were 93; 86 and 71% in the TAC-PLAC gr. and 90; 65 and 60 % in the TAC-STER gr. (p 0.09).During the first 3 years one TAC-PLAC patient died due to hepatocellular cancer (HCCa); five TAC-STER gr. 5 pts died due to HCV recurrence and one due to HCCa. One (7.1%) TAC-PLAC and two (9.5%) TAC-S TER pts had rejection therapy. One (7.1%) and 4 (19%) pts had antiviral therapy during the first post-LT year. During the first post-LT year no TAC-PLAC patient developed fibrosis (S3), cirrhosis (S4) nor lethal cholestatic hepatitis, whereas 2 (9.5%),3 (14.3%) and 2 (9.5%) TAC-STER pts did. S3 -4 Ludwig Score at 1 year was significantly higher in the TAC-STER gr. (5 pts vs. none in TAC-PLAC gr.; p 0.03). At 3 years 5 (35%) of 14 TAC-PLAC survivors and 6 (40%) of 15 TAC-STER survivors evolved towards S3-4 Ludwig score. During the 4 and 5 year of follow-up, one TAC-PLAC pt each died of de novo tumour at 45mo and of HCV recurrence and B-lymphoma at 54 mo; 4 TAC-STER pts in contrast died due to HCV recurrence at 49; 73; 76 and 79 mo. In total 1 (7%) of 14 TAC-PLAC pts and 9 of 21 (43%) TAC-STER pts died of HCV recurrence (p 0.045).

CONCLUSION: In this small patient series steroid-free, low-dose TAC IS has a major favorable impact on the early as well as long-term outcome of LT in HCV patients. Larger prospective studies with long-term follow-up are mandatory to confirm the presented results.

Abstract# P-45

SIROLIMUS HAS A POSITIVE EFFECT ON VIRAL RECURRENCE IN HCV POSITIVE LIVER TRANSPLANTED PATIENTS. Doris Wagner, Daniela Kniepeiss, Silvia Schaffellner, Estrella Jakoby, Helmut Mueller, KarlHeinz Tscheliessnigg, Florian Iberer. *Department for Surgery, Division for Transplantation, Medical University Graz, Graz, Austria*

An in-vitro role of mTOR proteins in the protection of HCV infected cells from apoptosis has been proven. The aim of this cohort study was to evaluate the effect of Sirolimus as mTOR inhibitor on Hepatitis C recurrence in liver recipients.

Hepatitis C virus positive patients were followed up prospectively regarding transaminases, immunosuppressive target levels, HCV RNA and influence of donor and recipient factors on viral recurrence and survival.

67 HCV-positive patients were included 39 received a Sirolimus including regimen, 18 patients stayed on calcineurininhibitors. Sirolimus patients showed a significant decrease in the HCV PCR levels ($p<0,05$). Survival of the Sirolimus patients was significantly higher ($p<0,03$) as compared to the other patient cohort.

Sirolimus has shown to be a potent immunosuppressive agent for patients after liver transplantation but is normally only administered to avoid side-effects of calcineurininhibitors. Nothing is known about its effect on HCV. This analysis suggests a potential of Sirolimus to be evaluated as immunosuppressant for HCV positive liver transplant candidates to suppress viral recurrence.

Abstract# P-46

PROLIFERATIVE ALLORESPONSE OF T-CYTOTOXIC CELLS IDENTIFIES REJECTION-PRONE CHILDREN WITH STEROID-FREE LIVER TRANSPLANTATION. Chethan Ashokkumar, Ali Abdulla, Qing Sun, Ankit Gupta, Rakesh Sindhi. *Hillman Center for Pediatric Transplantation, Children's Hospital of Pittsburgh and University of Pittsburgh, Pittsburgh, PA, USA*

Donor- and third-party-induced proliferation of T-helper (Th) and T-cytotoxic (Tc) cells, and their naïve and memory subsets was evaluated simultaneously in single blood samples from 77 children who received steroid-free liver transplantation (LTx) after induction with rabbit anti-human thymocyte globulin. Proliferation was measured by dilution of the intravital dye carboxy-flourescien-succinimidyl-ester (CFSE) in 3-4 day MLR co-culture. The ratio of donor: third-party-induced proliferated, ($CFSE^{low}$) T-cells was reported as the immunoreactivity index (IR) for each subset. Rejectors were defined as those who experienced biopsy-proven acute cellular rejection within 60 days of the assay. IR>1 signified increased risk of rejection and IR<1 implied decreased risk. *Results*: Demographics for 32 Rejectors and 45 Non-Rejectors were similar. Proliferated $CFSE^{low}$ T-cells and subsets were significantly higher among Rejectors, compared with Non-Rejectors. In 33 of 77 randomly selected children, logistic regression, leave-one-out cross-validation and ROC analyses showed that the IR of Tc associated best with biopsy-proven rejection (sensitivity>75%, specificity>88%). Sensitivity/specificity were replicated in the remaining 44 children, comprising the validation cohort. IR of $CFSE^{low}$ Tc correlated significantly with IR of pro-inflammatory, allospecific CD154+Tc ($r=0.664$, $p=0.0005$), and inversely with IR of allospecific, anti-inflammatory, CTLA4+Tc ($r=-0.630$, $p=0.007$). *Conclusions*: Proliferative alloresponses of T-cytotoxic cells can identify rejection-prone children receiving LTx.

Abstract# P-47

CONVERSION FROM PROGRAF TO ADVAGRAF IN PATIENTS AFTER LIVER TRANSPLANTATION. Marta M. Wawrzynowicz-Syczewska. *Infectious Diseases and Hepatology, Pomeranian Medical University, Szczecin, Poland*

Aim: Summary of one-year experience with conversion from b.i.d. formula of tacrolimus (Prograf) to one daily dose formula (Advagraf) in patients with the stable function of the liver graft.

Patients and methods: Replacement of Prograf by Advagraf was done in the following cases: 1. in patients with a stable graft function at least three months after OLTx; 2. in patients on regimens allowing one daily dosing after conversion (i.e. TAC+AZA+GS, TAC); 2. in patients with significant side effects of tacrolimus (i.e.headache, diarrhea) to see whether they would improve or abate; 4. only in subjects accepting frequent checks after conversion (one week apart at the beginning). Conversion dose was 1:1. Rejection episodes were sought. Trough level of tacrolimus and ALT levels before and after conversion were compared (mean value from the 3 subsequent examinations). Patients subjective opinion was questioned.

Results: Altogether 45 patients were converted. The analysis was performed appr. one year after conversion. Acute rejection was reported in three converted patients. In two cases it was a steroid-resistant rejection requiring reOLTx. Conversion as a reason of rejection was not proved (possible alcohol abuse in one case, drug interaction with the NSAIDs in the other). Median trough level of Prograf was 9.5 (5.0-17.6) ng/mL and was significantly higher than the median level of Advagraf of 6.3 (2.8-10.6 ng/mL, $p < 0.001$). Eleven patients required Advagraf dose increase by 1mg and 3 patients by 2 mg. Dose was reduced by 1 mg in 5 cases. Median ALT value on Prograf was 55.2 U/L (14.0-168.7) and was comparable with the median ALT value on