O-099 LIVER INMUNOPROTECTIVE EFFECT ON THE KIDNEY ALLOGRAFT IN SIMULTANEOUS LIVER AND KIDNEY TRANSPLANTATION

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Background: Simultaneous liver-kidney transplantation (SLK) has less incidence of renal graft rejection and inmunological graft lost against the receptors of an isolated renal transplantation (RT). In addition, a low rejection incidence and a good renal graft evolution have ben reported in cross-match (CM) positive (+) SLK patients. The low prevalence of immunological complications in high-risk immune ("HRI") SLK patients, suggests a liver's inmunoprotective effect on the kidney graft.
Material and methods: We present our experience in "HRI" SLK patients, defined as CM by cytotoxicity (CDC) post DTT + and/or "HRI" + pre transplantion (Tx). From May 1993 until December 2010, 58 SLK Tx were made (27 retransplanted patients), and eight patients had CM + pre Tx and other four patients had negative CM but positive "HRI".
Results: Of 12 "HRI" patients, 3 (25%) patients had graft dysfunction related to humoral acute rejection (HAR) during the first month after SLK Tx. Only one of these patients (33%) received Apheresis and Rituximab treatment with a good response. In the other two patients, HAR was resolved without specific treatment. None of 12 patients after 45±40 months follow-up, loss graft related to inmunological etiology. Six of 8 CM + pre Tx patients became negative post Tx.
Conclusion: High-risk inmune SLK patients have a low prevalence of immunological complications which suggests an inmunoprotector role of the liver on the kidney allograft in these patients.

O-100 EVOLUTION OF KIDNEY FUNCTION AFTER LIVER TRANSPLANTATION FOR ADULT POLYCYSTIC LIVER DISEASE AND INDICATIONS FOR COMBINED LIVER AND KIDNEY TRANSPLANTATION

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Background: Adult polycystic liver disease (PLD) is frequently associated with autosomal dominant polycystic kidney disease (ADPKD). Established indication for combined liver and kidney transplantation (CLKTx) is end stage renal failure. If renal insufficiency is less advanced, indications for combined kidney transplantation (KTx) are controversial. We reviewed our experience with isolated liver transplantation (LTx) and CLKTx in patients with PLD.
Methods: Between 1995-2008, 56 patients originating from 2 collaborating centers underwent LTx for PLD. 7 patients with isolated PLD received LTx alone. Of 49 patients with combined PLD and ADPKD, 31 underwent isolated LTx and 18 CLKTx. Among the 18 CLKTx recipients, 11 were dialysis-dependent pre-transplant whereas 7 had a creatinine clearance (CrCl) between 15 and 38 mL/min.
Results: Median follow up is 34 months (range, 26-167). 1 and 5-year patient and liver graft survival were 96% and 94%, and 96% and 90%, respectively. The 1 and 5-year kidney graft survival (death censored) is 100%. Of the 31 patients who underwent isolated LTx for combined PLD and ADPKD, 29% (n=9) developed terminal renal failure post-LTx. Their mean pre-LTx CrCl was 76 mL/min (range, 48-110). The mean pre-LTx CrCl in the 71% patients who display stable kidney function post-LTx was 78 mL/min (range, 47-153). Pre-LTx CrCl was not a significant factor for the development of renal failure after isolated LTx for combined PLD and ADPKD (p=0,835).
Conclusion: This series demonstrates that short- & long-term survival after LTx and CLKTx for PLD is excellent. In patients with clearly-proven & evolving renal impairment pre-transplant, CLKTx is the preferred option, anticipating the need for later KTx. In patients with preserved/mildly disturbed renal function, nephron sparing strategies are essential since evolution towards renal failure is seen in 29%, without clear prognosis factors.

O-101 LIVER TRANSPLANTATION (LTx) FOR TRANSTHYRETIN SYSTEMIC AMYLOIDOSIS DISORDERS: ANALYSIS FROM THE FAMILIAL AMYLOIDOTIC POLYNEUROPATHY WORLD TRANSPLANT REGISTER (FAPWTR)

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Background: Transthyretin (TTR) systemic amyloidosis disorders are treatable with Ltx. The FAPWTR was established in 1993 to assemble data on such patients.
Methods/Results: By December 2009, 1798 patients/1953 liver transplantations were reported to the FAPWTR from 72 centers in 19 different countries. Most transplantations were done in Portugal (n=866), France (n=216), Sweden (n=130) and Brazil (n=91). More than 45 different TTR-variants have been reported, the commonest being Val30Met (85%) followed by Ser77Tyr, Thr60Ala and Tyr114Cys. Gastrointestinal, cardiovascular and extraneurological manifestations appear more often in non-Val30Met than in Val30Met patients. 15% of the non-Val30Met patients underwent liver and heart transplantation compared to 0.1% of the Val30Met patients. Different countries show varying age at onset in Val30Met patients, with Brazil having the youngest patients and Sweden the oldest (32 years and 45 years, respectively). After Ltx, 80-90% of the ValMet30 patients reported stable or improved clinical symptoms compared to 60-65% in non-Val30Met patients. The overall 5-, 10- and 15-year patient survival is 79%, 70% and 64%, respectively. Most common cause of death is cardiac. Val30Met patients with a disease duration >7 years disclose inferior 5-year survival than patients with a duration ≤ 7 years (58.2% and 84.7%, respectively $p<0.001$). Results improve when analyzing patients transplanted in the last 5 years, but the 5-year survival still remains significantly better in patients with less than 7 years disease duration (72.1% and 88.7%, respectively $p<0.05$).
Conclusion: LTx is lifesaving in patients with TTR amyloidosis. Val30Met and non-Val30Met TTR mutations differ clinically. Cardiac related post transplant death is more common among these patients than patients transplanted due to chronic liver disease. FAPWTR data confirm the advantage of early transplantation but the long-term effects, especially for non-Val30Met patients, need further clarification.

O-102 INDOCYANINE GREEN CLEARENCE AS A TOOL TO PREDICT THE NEED OF LIVER TRANSPLANTATION IN PAEDIATRIC ACUTE LIVER FAILURE

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Bakground: Paediatric Acute Liver Failure (PALF) is a rare disease that results in death or the need of Liver Transplantation (LT) in nearly 50% of cases. The scoring systems aviables for the prognosis evaluation in adults are not able to predict survival without LT of paediatric patients. We aimed to assess the use of Indocyanine Green Plasma Disappearance Rate (ICG-PDR) as a tool to predict the evolution of patients affected of PALF.
Patients and Methods: All the patients enrolled were younger than 18 years without chronic liver disease, and present a prothrombin time (PT) higher than 15 sec or INR higher than 1.5 in the presence of Hepatic Encephalopathy (HE) or a PT higher than 20 sec or INR higher than 2 regardless of the HE. ICG-PDR were taken when the ALF diagnoses were performed and repeated every 24 hours until ALF resolution, death or LT. We calculated the Sensitivity (S), Specificity (E), Positive Predictive Value (PPV) and Negative Predictive Value (NPV) of ICG-PDR, KHC and Clychy s criteria.
Results: From January 2003 to July 2010, 68 patients were diagnosed of PALF. A total of 217 ICG-PDR were performed with a median ICG-PDR of 12.6%/min (r:6-26.95%/min). The median value of ICG-PDR was significantly lower in patients who suffered and irreversible liver injury compared with those who survived without LT (4.1%/min vs 20.5%/min respectively) (P 0.001). The S and PPV were higher for ICG-PDR than KHC and Clichy s criteria (S of 91.6%, 84% and 76% and VVP of 84.6%, 55% and 71% respectively)
Conclusion: ICG-PDR is an easy non-invasive tool that provides an accurate estimation of the need of LT in the setting of PALF under hemodinamic stability conditions.

O-103 CLINICAL RELEVANCE OF HLA-ANTIBODIES AFTER INTESTINAL TRANSPLANTATION

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Despite a negative crossmatch, intestinal transplant (ITX) recipients are capabale of mounting humoral immune reponses early after transplantation. The development of donorspecific HLA-antibodies (DSA) is associated with severe vascular graft injury and graft failure. We examined the development of HLA-antibodies in association with the clinical course and histopathological findings of 28 ITX recipients.
Between 06/2000 and 02/2011, 28 patients with a median age of 39.3±13.4 years received an isolated intestinal graft (n=18) or a multivisceral transplan-