Methods: Medical records from TTR-FAP adult patients submitted to liver transplant in a single center more than eight years ago were reviewed (until December 2006, 681 LT were performed, 179 by FAP; 125 patients are still alive, 28 of them with neurological syndrome *de novo*). All the patients were submitted to a thorough neurological workup, and almost all had normal exams. MRIs were not performed due to protocol cardiac pacemaker insertion prior to liver transplant.
Results: 28 patients (22%) developed the same transitory, sporadic "de novo" neurological symptoms such as generalized absence, drowsiness, headache, unilateral paresthesias, hemiparesis, aphasia, dysarthria, slurred speech, double vision, blurred vision, partial seizures and myoclonic, dizziness and vertigo syndrome, behavior changes and mental confusion. All patients are treated or have been in the past with calcineurin inhibitors (CNI), 26 with cyclosporine and 2 with tacrolimus; those in which CNI were suspended improved or remained without these symptoms.
Antiepileptic drugs were prescribed with partial remission of the symptoms.
Conclusions: Neurological syndrome *de novo* have a significant impact on quality of life of these patients. These symptoms may be due to the natural progression of the disease apparently due to the increased survival of these patients with the LT.
We must review the immunosuppression of these patients.
Further studies are needed to improve treatment and quality of life of the transplanted TTR-FAP.

P0051
PERIOPERATIVE WHITE BLOOD CELL COUNT AS A MARKER FOR PATIENT AND GRAFT SURVIVAL AFTER ORTHOTOPIC LIVER TRANSPLANTATION

F.A. Helfritz[1], F. Lehner[1], M.P. Manns[2], J. Klempnauer[3], S. Ciesek[2].
[1]General-, Visceral- and Transplant Surgery, Hannover Medical School, [2]Gastroenterology, Hepatology and Endocrinology, [3]General-, Visceral- and Transplant Surgery, Medical School Hannover, Hannover, Germany
E-mail: sandra_ciesek@hotmail.com

Background and Aims: Orthotopic liver transplantation (OLT) is a standard procedure in endstage liver disease. However, recipients of OLT have an 10–15% risk to die within one year after transplantation. We evaluated whether different parameters of infection including cytokines and blood cells predict post-OLT mortality, graft survival and rate of acute rejection.
Methods: We collected clinical and laboratory data of 104 patients undergoing liver transplantation between 2011 and 2012 from Hannover Medical School. Patients were stratified by (i) patient survival, (ii) graft survival and (iii) episode of rejection(s) and were followed from OLT for one year. Laboratory data of peritransplant period (0–4 days after OLT) were analysed.
Results: Inflammatory markers like CRP and procalcitonin had no significant effect on one-year patient or graft survival after OLT ($p = 0.3$ or $p = 0.8$ respectively). Interestingly, white blood cell count (WBC) early after OLT was a prognostic marker for patients ($p = 0.019$) and graft survivial ($p = 0.03$). Importantly, white blood cell count early after OLT was independent from rate of acute rejection episodes. White blood cell count >20,000/μl within the first four days after OLT was associated with a higher patient and graft mortality. Patient mortality was 30% (WBC >20,000/μl) in comparison to 13% (WBC <20,000/μl). These results were independent from the underlying liver disease or type of immunosuppressive regimen.
Conclusions: These data demonstrate that white blood cell count >20,000/μl early after OLT is a cheap prognostic marker for patient and graft survival, while perioperative procalcitonin and CRP have no influence.

P0052
INFUSION OF THIRD-PARTY MESENCHYMAL STROMAL CELLS AFTER LIVER TRANSPLANTATION: A PHASE I, OPEN-LABEL, CLINICAL STUDY

O. Detry[1], M. Vandermeulen[1], M.-H. Delbouille[1], A. Deroover[1], J. Somja[2], N. Bletard[2], A. Briquet[3], C. Lechanteur[3], Y. Beguin[3]. *[1]Dpt of Abdominal Surgery & Transplantation, [2]Dpt of Pathology, [3]Dpt of Hematology, University of Liege, CHU Liege, Liege, Belgium*
E-mail: olivier.detry@transplantation.be

Background and Aims: Mesenchymal stromal cells (MSC) are multipotent bone marrow progenitors that have demonstrated significant immunosuppressive effects in various *in vivo* and *in vitro* studies. This study aimed to be the first evaluation of the safety and tolerability of MSC infusion after liver transplantation in a prospective, controlled phase-1 study.
Methods: Clinical grade MSCs were locally collected from the bone marrow of unrelated healthy donors. They were cultured in a GMP-compliant lab, underwent extensive quality controls and were frozen for storage in a MSC bank. When needed for patient treatment, MSC were thawed and intravenously injected into patients. 10 liver transplant recipients under standard immunosuppression (TAC-MMF-low dose steroids until day 30) received $1.5–3 \times 10^6$/kg MSC on post-operative day 3 ± 2. These patients were prospectively compared to a group of 10 control (MSC-) liver recipients. Primary endpoints were MSC infusion toxicity, and incidence of cancer and opportunistic infections at month 6. Secondary endpoints were patient and graft survivals and rejection at month 6, as well as the effects of MSC on recipients' immune function and on immunohistology of at month 6 graft biopsies.
Results: No MSC infusional toxicity was observed. Both groups were comparable in terms of donor and recipient characteristics. There was no difference in primary end-points between control and MSC groups. No patient developed *de novo* cancer. There was no statistical difference in patient and graft survivals or in rejection rates. There was no graft rejection in the MSC group. Month-6 graft biopsies were not different according to Banff and fibrosis scores.
Conclusions: This phase 1 study showed excellent tolerability and safety of a single infusion of third-party MSC after liver transplantation. There were no graft safety issues and no excess of immunosuppression after MSC injection. Further analyses of consequences of MSC injection on the immune profile are needed. The possibility of avoiding calcineurin-inhibitors with repeated MSC injections as main immunosuppressive therapy and/of tolerance induction by MSC infusion should be investigated by further studies.

P0053
DINSTICT INTRAHEPATIC CYTOKINE PROFILES FOR THE DIFFERENTIATON OF ACUTE CELLULAR REJECTION VS RECURRENT HEPATITIS C IN LIVER TRANSPLANTED PATIENTS

P. Fytili[1], T. Krech[2,3], A. Gonnermann[4], A. Großhennig[4], D. Jonigk[2], F. Lehner[5], M.P. Manns[1], A. Koch[4], J.U. Becker[2,6], H. Wedemeyer[1].
[1]Department of Gastroenterology, Hepatology and Endocrinology, [2]Institute of Pathology, Medical School of Hannover, Hannover, [3]Department of Pathology, University Medical Center Hamburg-Eppendorf, Hamburg, [4]Institute for Biometry, [5]Clinic for General, Abdominal and Transplant Surgery, Medical School of Hannover, Hannover, [6]Department of Pathology, University of Cologne, Cologne, Germany
E-mail: pfytili@hotmail.com

Background and Aims: Graft reinfection in liver transplanted patients with hepatitis C virus (HCV) infection is universal and triggers rejection episodes as well as liver damage and fibrosis. Reliable differentiation between HCV infection early after liver transplantation and acute cellular rejection (ACR) is of great importance for clinicians and poses a challenge for pathologists.