any consensus is available about the system to avoid AK. The HAK appeared when the liver is in its final position as demonstrated by our HAF measures (HAF drop-down in all patients). The surgicel or the omentum interposition guarantee a maintenance of a good HAF also when the abdominal wall closure is performed.

O-044 SINGLE CENTER EXPERIENCE OF CONSECUTIVE 500 CASES OF HEPATIC ARTERY ANASTOMOSIS IN LIVING DONOR LIVER TRANSPLANTATION

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Background: Hepatic arterial complication after liver transplantation (LTx) is a major source of morbidity and mortality. Only early diagnosis and treatment will save the patient's life. We analyzed consecutive more than 500 living donor liver transplantation (LDLT) patients for risk factor and result.
Method: From August 2004 to May 2010, total 522 patients including pediatric and adult LDLT were done by our center and retrospectively reviewed. Hepatic arterial anastomosis was done under Microscope and by interrupted suture with Prolene 8-0. We routinely checked intraoperative Doppler at POD#1, #3, #5 or #7. Hepatic arterial complication included thrombosis and stricture.
Results: The overall complication rate related to arterial reconstruction in LDLT was 4.6% (24 cases). 17 patients had an arterial stricture and 7 patients had an arterial thrombosis. 7 patients of 24 patients were explored and revised hepatic artery. 2 of them underwent retransplantation because of recurrent thrombosis and hepatic failure. Another 6 patients were treated with interventions. The rest 10 patients were only observed closely under antiplatelet agents because of mild disease severity. Among 24 patients, 7 patients were died. Only preoperative alcohol ingestion (p=0.014) and POD#7 Doppler RI index below 0.6 (p=0.039) were associated hepatic arterial complication. Against noted risk factors of hepatic arterial complication, our analysis reveals that arterial complication is not associated with arterial number, anatomy and pediatric LTx. Most of the hepatic arterial complications (19 of 24 cases) occurred within 1 month after LTx.
Conclusions: The risk factors of hepatic arterial complication after LDLT were preoperative alcohol ingestion and POD#7 Doppler finding and most complications occurred within 1 month. Regular Doppler check after LDLT should be considered as early diagnosis method for arterial complication and treatment of hepatic arterial complication should be designed by individually.

O-045 IMPACT OF PREVALENT STEATOSIS ON OUR LIVING DONOR LIVER TRANSPLANT PROGRAM: ANALYSIS OF 975 LIVING RELATED LIVER DONORS

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Organ shortage has been the ongoing obstacle to expand liver transplantation world-wide.Living donor liver transplantation (LDLT) was hoped to improve this shortage. We aimed to analyse the results of the evaluation of potential living donors at our center and determine the prevalence of macrosteatosis.
Methods: From 2001 to 2010, 192 deceased donor liver transplants and 90 living donors liver transplants (LDLT) were performed. 975 potential living donors were worked up according to a step-wise evaluation protocol. Their age ranged from 18 to 60 years, with 75% in the third and forth decades. They were all first and second degree relatives of the patients.
Results: Only 90 (9.2%) were accepted for donation and 885 (90.8%) were rejected. 793 (around 80%) were excluded at the earlier stages of evaluation: either at initial screening due to high body mass index or due to incompatible blood group, positive hepatitis serology, elevated liver enzymes, miscellaneous systemic diseases, socioeconomic reasons, abnormal anatomy or insufficient volume as determined by CT volumetry. 182 reached the step of liver biopsy. Of these, 44 (24%) were rejected due to abnormal fat content. As regards the remaining 138, 48 were excluded either due to abnormal histopathology (other than steatosis) or the operation was aborted due to the recipients' condition. Finally 90 underwent donation.
Conclusion: There is no doubt that LDLT has helped in alleviating the severe shortage of deceased organs in Saudi Arabia. However suitable living donors are not easy to find especially right lobe donors. Our initial evaluation is effective in eliminating a large number of unsuitable donors.However,steatosis remains a problem encountered at a later stage of the evaluation. The donor evaluation process indeed remains to be a large burden on the resources of our program

O-046 MULTICENTER BELGIAN SURVEY ON DONOR MORBIDITY AND MORTALITY IN ADULT-TO-ADULT LIVING DONOR LIVER TRANSPLANTATION

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Background: The development of Adult Living Donor Liver Transplantation (ALDLTx) programs in many western LTx centers has decreased due to reported donor morbidity/mortality.
Methods: The Belgian Royal Academy of Medicine proposed a national survey in order to assess donor morbidity/mortality after ALDLTx in Belgium. Between 09/1999 & 09/2010, 143 ALDLTx were performed in 4 Belgian University Hospitals: UZ-Ghent, UCL-Brussels, KUL-Leuven and ULg-Liege. Median donor age was 35 years (range: 19-59). Majority of donors were children (57%) and spouses (15%).
Results: Aborted procedures due to inaccurate preoperative volume assessment were encountered in 7 (5%) donors. 136 donors actually underwent liver donation. Complications occurred in 48/136 (35%), mostly due to UTI (14%), biliary fistula (7%), nerve palsy (5.4%), pulmonary complications (5.4%), early reoperation for bleeding and biliary complications (5.4%); and late reoperation (cicatricial hernia's) (3%). Portal vein thrombosis occurred in 3%. Mean hospital stay was 12±3 days. Hospital readmission was necessary in 3/135 (2.2%) patients. One death occurred in a right lobe donor due to impaired remnant liver regeneration and who expired after a sequential cascade of complications and during urgent liver transplantation at postLTx day 49.
Conclusions: Incidence and type of donor complications after ALDLTx in Belgium are comparable to those reported in the ELTR. Donor death is a rare event (0.7%) related to impaired liver remnant regeneration. Inaccurate preoperative assessment also led to procedure abortion in 3%. This emphasizes the need to more reliably predict preoperatively the actual liver volumes and the regeneration capacity of the remnant liver.

Basic science and immunobiology

O-047 INTERLEUKIN-33 PROLONGS ALLOGRAFT SURVIVAL THROUGH REDUCTION OF ANTIBODY MEDIATED CARDIAC REJECTION

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IL-33 stimulates the generation of cells, cytokine and immunoglobulin production characteristic of a type 2 immune response. In this study, we demonstrate the effect of IL-33 on allograft function during chronic cardiac rejection in mice.
B6: C-H2bm12/KhEg hearts were transplanted into wild type MHC class II-mismatched C57BL/6J mice. IL-33 was administered i.p. daily. Cardiac allografts were harvested, graft infiltrating CD4+ T-cells were isolated and cytokine production was determined by ELISA. Isolated leukocyte populations were examined by flow cytometry and alloantibody levels were determined. Further, immunohistochemical staining of cardiac allografts was performed.
Allogeneic transplanted controls showed progressive allograft rejection within 21.5 days after transplantation, whereas allograft survival in IL-33-treated animals was extended to more than 50 days. Prolonged allograft survival was accompanied by significant changes in cytokine production by graft infiltrating CD4+ T-cells. We observed a significant decrease in the production of proinflammatory IL-17A and significantly increased levels of Th2-cytokines IL-5, IL-13 and antiinflammatory IL-10. In addition, IL-33 treatment resulted in homeostatic changes of the lymphoid and myeloid compartment in both the cardiac allografts and periphery. Flow cytometric analyses demonstrated a reduction of graft-infiltrating CD19+b220+ B-cells following IL-33 therapy. Accordingly, IL-33 treated mice showed reduced alloantibody levels in the serum and less immunoglobulins as determined by immunohistochemical analysis of the grafts. In addition, a significant decrease in graft infiltrating CD11bhigh Gr1high granulocytes coinciding with a significant increase in suppressive CD11bhigh Gr1intermediate myeloid cells was observed after IL-33 therapy.
IL-33 treatment prolongs allograft survival after cardiac transplantation in mice.