Introduction: A small subgroup of patients undergoing liver transplantation (LT) require retransplantation (RT), which is correlated with significantly higher morbidity, lower survival rates and increased medical costs. The purpose of the study is to determine the predictive factors of RT, following LT, clinical and laboratory findings were studied during the period from 2013 till 2016, effectuated by a medical team from Republican Clinical Hospital.

Materials and Methods: Liver transplant evidence was sourced from the National Transplantation Agency database starting with February 1st, 2013, to March 20th, 2016. Covariates selected from the database for inclusion in the analysis admitted: recipient's age, cold and warm ischemia time, donor's type (cadaveric versus living), body mass index (BMI), model for end-stage liver disease (MELD) score at transplant, albumin level at transplant, gender of the recipient and transplant year. Recipient hepatitis C virus (HCV) and hepatocellular carcinoma (HCC) status were determined by using United Network for Organ Sharing (UNOS)/Organ Procurement and Transplantation Network (OPTN) primary diagnosis coding. Generalized linear modeling was used to determine the odds ratios (ORs) for the risk of RT in liver transplant recipients. Accordi ng to National Transplantation Agency of Republic of Moldova since 2013 were registered 212 potential brain death donors, but families of 99 (46,69 %) of them have refused donation.

Discussion results: A total of 19 patients underwent LT during the study p eriod, with 5 patients needing RT and only one patient has undergone RT because of lack of donors. Results from the univariate analyses identified the following risk factors which predicted the likelihood of RT: age of the recipient, BMI, HCV status, HBV+HDV status, HCC status, MELD score, albumin levels, cold ischemia time and year of transplant. Multivariate analysis showed the following risk factors which predicted the probability of RT: recipient's age, gender, BMI, HBV+HDV status, HCV status, cold isch emia time, donor type and year of transplant. Importantly, female gender, higher BMI, HCV positivity, longer cold ischemia time and living donor LT resulted in higher odds for RT.

Conclusion: Our analysis identified several host and graft-related predictors of RT in liver transplant recipients. Efforts must be directed to reduce the significant number of RT in the era of donor shortage and ever increasing demand for LT. Both, the community and physicians should therefore approach organ transplant positively and objectively and treat ethical, social and religious issues as negotiable perspectives and not barriers to organ transplant.

Key Words: Living donor living transplant, Retransplantation, Predictor factors

147. DECELLULARIZED TISSUE ENGINEERED PERICARDIUM AS REPLACEMENT FOR TRICUSPID VALVE IN CARDI AC SURGERY.

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Introduction: Tricuspid valve replacement is the last treatment choice in tricuspid valve pathology. The choice to insert mechanical or bioprosthetic valve remains controversial. Both prostheses have some limitations such as infection, risk of thromboembolism, need for life-long anticoagulation or limited durability. The following study aimed to develop a novel tissue-engineered tricuspid valve based on decellularized pericardium allograft.

Materials and methods: Fresh ovine pericardium was harvested at the local slaughter house and decellularized using detergents. For disinfection all samples were treated for 24h with Phosphate Buffered Solution supplemented with 1% gentamicin and 1% streptomycin. The effectiveness of decellularization was evaluated by histological staining (hematoxylin-eosin, Movat's Pentachrom and Van Gieson), Isolectin B4 staining (a-gal xenoantigen) and by DNA-quantification. Two valvular leaflets were manufactured out of decellularized pericardium and sutured ex-vivo into the tricuspid annulus of an ovine heart and suspended on papillary muscles. Hydraulic test were performed to prove valve competency.

Discussion results: After detergent treatment pericardial tissue has been converted in a cell-free scaffold as proven by standard histological analysis. Immunofluorescent examinations revealed the absence of a-gal xenoantigens. DNA-quantification showed a substantial reduction in DNA content compared to the normal tissue. The alignment of collagenous fibers in decellularized scaffolds appeared well-preserved and was not affected by detergent decellularization procedure as proven by histological staining. Graft disinfection and storage in antibiotic solution after decellularization did not affect the texture of the scaffold. Furthermore, two leaflet structure created out of decellularized pericardium and surgically sutured in tricuspid position of ovine heart resulted in a competent valve prosthesis.

Conclusion: The present results have shown successful decellularization of the ovine pericardium using detergents. Decellularized pericardial allograft can be used in cardiac surgery as a scaffold for valvular tissue engineering or for in-vivo guided tissue regeneration in tricuspid valve replacement.

Key Words: Tissue Engineering, Cardiac Surgery, Tricuspid Valve, Pericardium.

Acknowledgements: This study is conducted in the context of the ESPOIR project (European clinical study for the application of regenerative heart valves supported by the European Union's Seventh Framework Programme for Research, technological Development and Demonstration under Grant Agreement No. 278453) and supported by the DAAD (German Academic Exchange Service).

148. EVALUATION OF THE VA RICOSE VEINS AS A SU RROGATE MARKER OF THE THROMBOPHILIC DISORDERS IN PREGNANCY

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Introduction: A successful pregnancy outcome requires an efficient utero-placental circulation. It may be compromised by hemostasis disorders Associated with a prothrombotic state, such as thrombophilia. Thrombophilia includes a large spectrum of disorders that have been assigned to