

and nucleos(t)ide analogues, without any episode of viral recurrence. HDV related cirrhosis remained a stable indication to LT in the last decade, displaying optimal graft and patient survival and absence of post-LT viral recurrence.

OS405

DAA TREATMENT IN PATIENTS UNDERGOING LIVER TRANSPLANTATION FOR HEPATOCELLULAR CARCINOMA: DOES TREATMENT TIMING CHANGE HCC RECURRENCE RISK?

Sarah Shalaby¹, Alberto Zanetto¹, Alberto Ferrarese¹, Chiara Becchetti¹, Salvatore Stefano Sciarone¹, Monica Pellone¹, Francesca D'Arcangelo¹, Martina Gambato¹, Giacomo Germani¹, Marco Senzolo¹, Francesco Paolo Russo¹, Umberto Cillo², Patrizia Burra¹

¹Multivisceral Transplant Unit, Department of Surgery, Oncology and Gastroenterology, Padua University Hospital; ²Hepatobiliary Surgery and Liver Transplant Unit, Department of Surgery, Oncology and Gastroenterology, Padua University Hospital

Introduction: Since the widespread adoption of new direct antiviral agents (DAA), the approach to HCV infection has deeply changed, as almost all the patients can be cured regardless the stage of liver disease. However, conflicting evidences have been reported regarding the risk of recurrence of hepatocellular carcinoma (HCC) in patients undergoing liver transplantation (LT). In particular, data on the impact that the timing of DAA treatment could have in terms of risk of tumoral recurrence after LT, are still scarce.

Materials and methods: All HCV patients transplanted for HCC and treated with DAAs at Multivisceral Transplant Unit, were retrospectively evaluated. For each patient clinical, serological and virological data were collected. HCC characteristics were retrieved from pathological assessment of liver explants and recurrence-rates were calculated. Patients treated with DAA while waitlisted were compared with those treated in the post-LT setting.

Results: Fifty patients were enrolled, 18 of which were treated while awaiting LT and 32 afterwards, achieving sustained viral response (SVR) in 94% of cases in both groups (p=NS). Histopathological analysis showed no differences in terms of median number and total tumor volume of HCC nodules, tumor differentiation or microvascular invasion. Median follow-up after LT was 21 and 36.5 months, for patients treated in the pre- and post-LT setting, respectively. During the follow-up 2/18 (11%) and 3/32 (9.3%) patients experienced HCC recurrence (p=NS), respectively. All of these patients did achieve SVR after first DAA course, except for one patient treated after LT, which relapsed after both SOF/RBV and DCV/SOF-based regimens.

Conclusions: Post-transplant HCC recurrence rates in both our cohorts were similar to the internationally reported ranges, with no higher risk. Furthermore, the timing of antiviral treatment did not seem to modify the risk of recurrence, either if started in the pre or post-LT setting.

OS406

HEPATITIS C VIRUS CAN BE ELIMINATED FROM A PREVALENT KIDNEY TRANSPLANT RECIPIENT POPULATION: A SINGLE-CENTRE STUDY IN THE DIRECT-ACTING ANTIVIRALS ERA

Arnaud Devresse¹, Bénédicte Delire², Jeffrey V Lazarus³, Benoît Kabamba⁴, Martine De Meyer⁵, Michel Mourad⁶, Antoine Buemi⁶, Tom Darius⁵, Jean-François Cambier⁶, Eric Goffin¹, Michel Jadoul¹, Nada Kanaan¹

¹Division of Nephrology, Cliniques Universitaires Saint-Luc, Brussels; ²Division of Hepatology, Cliniques Universitaires Saint-Luc, Brussels; ³Barcelona Institute for Global Health (ISGlobal), Hospital Clínic, University of Barcelona, Barcelona; ⁴Division of Microbiology, Cliniques Universitaires Saint-Luc, Brussels; ⁵Division of Abdominal Surgery and Transplantation, Cliniques Universitaires Saint-Luc, Brussels; ⁶Division of Nephrology, Grand Hôpital de Charleroi (GHdC, site St-Joseph), Gilly

Background: Direct-acting antivirals (DAAs) have recently revolutionized the treatment of hepatitis C (HCV) infection. Although previous studies have reported positive results with DAAs after kidney transplantation (KT), its impact on the real-world prevalence of HCV viremia in prevalent kidney transplant recipients (KTR) remains ill-defined.

Methods: We retrospectively reviewed the HCV status (serology, polymerase chain reaction) of all KTR followed at our outpatient KT clinic between 01/2014 and 12/2018 (n = 1451). We calculated the evolution of the prevalence of HCV viremia (HCVv) over this period and reviewed the clinical features of KTR treated with DAAs while having a functioning graft.

Results: Out of 1451 KTR, 22 (1.52%) had HCVv while having a functioning graft in 2014-18. From 2014 to 2018, annual prevalence of HCVv dropped from 1.97% to 1.81%, 1.77%, 1.79% and 0.43%, respectively (p < 0.001). Fourteen KTR were treated with DAAs (sofosbuvir/velpatasvir, n = 4; elbasvir/grazoprevir, n = 5; sofosbuvir/daclatasvir, n = 2; sofosbuvir/ledipasvir, n = 2; ombitasvir/paritaprevir/dasabuvir, n = 1), a median of 197 months (ranges: 5-374) after KT, mostly (79%) in 2017 after reimbursement of DAAs for KTR in Belgium. None of the treated KTR experienced graft loss, acute rejection, *de novo* donor specific antibody occurrence or allograft dysfunction during or after DAAs treatment; however, 2 patients died 14 months (B-cell lymphoma, despite sustained virological response (SVR) at 12 weeks after treatment) and 7 months (metastatic hepatocarcinoma, no SVR12) after DAAs initiation, respectively. SVR12 rate was 93%. Among HCVv KTR not treated with DAAs (n = 8), 2 lost their graft and 5 died. The current prevalence of HCVv in our cohort is 0.08% with a single patient to treat (ongoing).

Conclusion: The increased use of DAAs led to a dramatic decrease of HCVv prevalence in our cohort of KTR. DAAs use was safe and effective. The elimination of HCV in prevalent KTR is now possible.

OS408

PREVALENCE OF ACTIVE HEPATITIS E VIRUS INFECTION AND EFFICACY OF RIBAVIRIN TREATMENT IN RENAL ALLOGRAFT RECIPIENTS

Justa Friebus-Kardash¹, Ute Eisenberger¹, Jessica Ackermann², Andreas Kribben¹, Oliver Witzke³, Jürgen Wenzel⁴, Rohn Hana³, Melanie Fiedler²

¹Department of Nephrology, University Hospital Essen/University Duisburg-Essen; ²Institute for Virology, University Hospital Essen, University Duisburg-Essen; ³Department of Infectious Diseases, University Hospital Essen, University Duisburg-Essen; ⁴Institute for Clinical Microbiology and Hygiene, National Consultant Laboratory for HAV and HEV, University Hospital Regensburg

Hepatitis E virus (HEV) genotype 3 infection frequently progresses to chronic disease with persisting HEV viremia in immunocompromised patients. Here, we evaluated the prevalence of HEV infection in renal allograft recipients and investigated the efficacy and tolerability of ribavirin monotherapy.

A total of 947 recipients on average 8.7 years posttransplant were screened for anti-HEV IgG, IgM and HEV-RNA. Sixteen HEV-viremic renal allograft recipients were treated with ribavirin for 12 weeks. HEV-RNA concentration, laboratory and clinical parameters were assessed at baseline, during therapy and 12 weeks after treatment cessation. HEV-genotyping was performed in all HEV-viremic patients.

Past HEV infection was detected serologically in 18% of the renal allograft recipients. Ongoing HEV replication was found in 16 recipients (all genotype 3). Unanimously, distinct HEV-sequences were revealed in all HEV-viremic patients. At start of ribavirin treatment, median HEV-RNA viral load was 4.3x10⁶ (8000-5.0x10⁶) IU/mL. 94% of HEV-infected allograft recipients showed a sustained virological response 12 weeks after treatment cessation. Ribavirin treatment was associated with rapid decrease in liver enzymes and rare occurrence of anemia.

Prevalence of active HEV infection is important in renal transplant patients without signs of nosocomial infection. Ribavirin treatment was safe and effective.