Liver transplantation is an excellent management option for patients with advanced chronic liver disease. In our setting, the clinical outcome in terms of relapse rate for patients undergoing liver transplantation due to autoimmune hepatopathies is unknown. This study aims to characterize the relapse rates in patients transplanted for autoimmune hepatopathy at a Colombian liver transplant center.

Materials and Methods: A longitudinal retrospective descriptive study of a cohort of patients with autoimmune hepatopathy who underwent liver transplantation from November 2005 to December 2022.

Results: A total of 163 patients were transplanted for autoimmune pathology. The relapse rate within the first year was 2.6% (n=2) for AIH, 3.7% (n=1) for PBC, 9.2% (n=5) in overlap syndrome, and 16% (n=1) in PSC. Between the first and fifth year post-transplantation, the relapse rate was 13.1% (n=10) in AIH, 14.8% (n=4) in PBC, 29.6% (n=16) in overlap syndrome, and 0% in PSC. Between the fifth and tenth year, the relapse rate was 11.8% (n=9) in AIH, 22.2% (n=6) in PBC, 9.2% (n=5) in overlap syndrome, and 0% for PSC. The cumulative relapse rate at 10 years was 27.6% for AIH, 40% for PBC, and 16% for PSC.

Conclusions: In this population, the one-year, five-year, and ten-year relapse rates were similar to those reported in the literature at other liver transplant centers. These findings warrant further studies in the population with CBP to determine if there is any genetic susceptibility that predisposes to a higher relapse rate compared to other autoimmune liver diseases.

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P- 63 UTILITY OF TRANSJUGULAR INTRAHEPATIC PORTOSYSTEMIC SHUNT IN TREATING COMPLICATIONS OF PORTAL HYPERTENSION: EXPERIENCE IN UNIT OF LIVER TRANSPLANTATION IN URUGUAY

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Introduction and Objectives: Trans jugular intrahepatic portosystemic shunt (TIPS) is the major therapeutic alternative for treating portal hypertension-related complications (PHT) that do not respond to medical treatment. It is commonly used as a bridge therapy to liver transplantation (LT). TIPS improves quality of life, overall survival, and LT-free survival while reducing the incidence of decompensation. Adequate patient selection is crucial for rightful indication. This study aimed to present the utility of TIPS on the complications of refractory PHT that dont respond to standard of care medical treatment.

Materials and Methods: From July 2017 to December 2022, all consecutive patients with PHT admitted to receiving TIPS creation were retrospectively analyzed. The objective was to decrease the portal pressure gradient below 12 mmHg or >50% of its baseline. Follow-up was performed using Doppler ultrasound to monitor permeability and function.

Results: 264 patients were evaluated for LT, of whom 15 had complications of refractory PHT that did not respond to medical treatment (Table1). Nine were females and six males. Mean age of 47 years old. Eight (53%) had refractory ascites, and seven (47%) had recurrent variceal bleeding. The median follow-up period was 38 (1-66) months. Success was assessed based on hemodynamic, clinical, and imaging parameters. All patients had favorable outcomes, with transient hepatic encephalopathy observed in 3 cases and hemolytic anemia in one case. Global dysfunction occurred in 20% of patients at one year but was corrected through stent angioplasty. Four patients underwent transplantation, and eight were removed from list due to clinical improvement. Two patients died, and one is currently on the waiting list. Overall survival rates were 93% at one year and 87% at three years.

Conclusions: TIPS is a highly useful therapeutic tool which is applied in our center. Proper patient selection allows for similar overall and transplant- free survival rates as reported internationally.

Case	Age	Gender	MELD Na	Child-Pugh	Indication	Follow-up time (months)
1	61	F	22	B8	RVB	66
2	47	F	10	B9	RA	66
3	20	F	10	B7	RVB	57
4	64	F	9	A6	RVB	50
5	37	F	14	NA	RA	46
6	14	M	9	NA	RVB	46
7	50	F	17	C10	RA	40
8	67	F	14	C10	RA	38
9	62	M	22	NA	RVB	38
10	68	M	16	B9	RA	21
11	56	M	NA	NA	RVB	21
12	55	F	9	B8	RA	21
13	16	M	11	A6	RVB	11
14	26	F	NA	NA	RA	1
15	63	M	11	B8	RA	3

Table 1 - Demographic and clinical data of the patients.

F: Female, M: Male, NA: Not applicable, RVB: recurrent variceal bleeding, RA: refractory ascites.

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O-1 SEROPREVALENCE AND MOTHER-TO-CHILD TRANSMISSION OF HEPATITIS B AND C VIRUSES AMONG PREGNANT WOMEN IN A MATERNAL AND CHILDREN HOSPITAL FROM THE PROVINCE OF BUENOS AIRES

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Introduction and Objectives: The WHO proposed to eliminate viral hepatitis by the year 2030. To achieve this ambitious goal, we must evaluate the seroprevalence of these infections in different populations. This study aimed to estimate the seroprevalence of hepatitis B (HBV) and C (HCV) among pregnant women and mother-to-child transmission in a maternal hospital.

Materials and Methods: We conducted an observational, prospective and consecutive study including pregnant women from San Isidro Maternal and Children Hospital whose births occurred between 05/01/2019 and 04/30/2021. In all patients HBsAg and anti-HCV were assessed during the 1st and 3rd trimester of pregnancy together with HIV. In the case of presenting HBsAg+, anti-HBcIgG was performed on the same sample followed by HBV-DNA PCR. In the case of presenting

anti-HCV+, a confirmatory test was performed with PCR HCV-RNA. Neonates of HBsAg+ or HCV+ were follow-up for 3 years.

Results: 2762 births were included during the period under study. Five (0.18%) HBsAg+ pregnant women were identified, median age was 25 years (range 17-36), of which only 1 had anti-HBcIgG+. Given the suspicion of chronic HBV and the delay in obtaining the HBV-DNA results, treatment with tenofovir was started. In successive controls, no chronic HBV infection was diagnosed in neonates. Anti-HCV + was detected in 8 (0.29%) patients, with a median age of 29 years (range 19-38 years), of which only one patient presented detectable HCV-RNA, genotype 4. This patient had a diagnosis of HCV chronic prior to pregnancy and her son presented anti-HCV- at age 3. Finally, one patient with HBsAg+ and another with anti-HCV+, but negative viral loads presented HIV+.

Conclusions: The gestation period is an excellent opportunity to carry out health checks. During the studied period, the seroprevalence of HBsAg+ and anti-HCV+ was very low. These types of interventions are essential to achieve the objectives set by the WHO.

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O-2 EVALUATION OF RISK FACTORS AND PROGNOSIS OF HEPATOCELLULAR CARCINOMA RECURRENCE AFTER LIVER TRANSPLANTATION

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Introduction and Objectives: Liver transplantation (LT) is the preferred treatment for early-stage HCC. Despite restrictive criteria (Milan), recurrence is high and negatively impacts on LT survival. This study aimed to evaluate risk factors and prognosis of HCC recurrence after LT.

Materials and Methods: Retrospective Brazilian university hospital HCC-transplanted cohort (2002 -2021). Patients transplanted for other causes, with a follow-up < 1 year or with incidental HCC at explant were excluded. Primary outcome was recurrence of HCC. Secondary outcomes were survival and time elapsed until HCC diagnosis. Tumor burden was the sum diameter of all nodules at explant. Data extraction was conducted with Excel, and statistical analysis was performed with SPSS.

Results: 186 patients were included (males 123 [66.1%], median age 56 years-old), 153 (82.3%) Milan-in. Locoregional waiting-list therapy was trans arterial chemoembolization (TACE), percutaneous ethanol injection (PEI) or TACE + PEI in 63 (34.2%), 58 (31.5%) and 42 (22.8%) individuals, respectively. Downstaging was achieved in 31 patients (17.8%). Explant analysis with microvascular invasion and Milan-out was detected in 31 (16.9%) and 33 (18%) individuals, respectively. HCC recurrence occurred in 22/183 patients (12%), associated with pre-LT alfa-fetoprotein (AFP) (1.881 [IQR 109-4.510] x 6 [IQR 3-39], p=0.02), Milan-out at explant (59.1% x 11.3%, p<0.0001), microvascular invasion (45.5% x 13.9%, p<0.001), and tumor burden at explant (3.9 cm [IQR 3.2-7] x 3 cm [IQR 2-4], p=0.02). Downstaging had no impact on HCC reappearance. Median recurrence time was 22 months (IQR 10.5-42.5); most frequent sites were lungs (18.2%), liver (13.6%) or multiple (36.4%). Median survival after HCC recurrence was 17 months (IQR 6.5-36).

Conclusions: Tumor burden, Milan-out at explant, microvascular invasion and higher pre-LT AFP levels had a negative impact on HCC recurrence. This can identify patients with higher risk of recurrence by planning screening protocols and making early diagnoses to guide effective treatment.

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O-3 DEVELOPMENT OF LENTIVIRAL VECTORS FOR INHIBITION OF HEPATITIS B VIRUS VIA SMALL INTERFERING RNA

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Introduction and Objectives: It is estimated that chronic hepatitis B virus (HBV) infection accounts for one million deaths/year due to cirrhosis and liver cancer. Currently, several drugs are used in the treatment of HBV; however, a complete cure is still controversial. The major challenge is the persistence of viral covalently closed circular DNA (cccDNA), as well as the ability of HBV to integrate into the host genome, which enables the infection's reactivation. Interfering RNA (RNAi) is a post-transcriptional mechanism of gene silencing and is a promising alternative for the treatment of chronic hepatitis B. We aimed to construct effective RNAi lentiviral vector to silencing HBV proteins (HBsAg, HBcAg, HBeAg) and pre-genomic RNA (pgRNA), via RNAi.

Materials and Methods: The silencing vector candidates targets overlapped Open Reading Frames (ORFs), allowing different viral proteins and the pgRNA to be silenced with a single RNAi. The efficiency of silencing by lentiviral vectors candidates used individually or in combination, have been assessed by quantification of HBV proteins by eletroquimioluminescence and quantification of HBV DNA during the post-transfection period by quantitative PCR.

Results: Three silencing vectors candidates were constructed and tested in silico to prevent off-target effects. Stability and secondary structures have also been tested. Huh7 cells were transfected with 1ug of purified HBV genome circular monomers (genotype A1) and 3 days later, infected with the first lentiviral candidate (siHBV-1), targeting S/Pol genes of HBV (108 TU/mL). From the third day post-infection, HBsAg became undetectable on cells infected by the lentiviral vectors, while untreated controls maintained viral protein expression (p<0.002). HBV DNA were also undetectable by PCR.

Conclusions: siHBV-1was able to silence HBV in vitro. This approach allows long- term, sustained knockdown of HBV replication and gene expression, which can effectively promote HBV clearance in chronic carriers.

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O-4 MBOAT7 RS641738 IS ASSOCIATED WITH PROGRESSION TO CIRRHOSIS IN NON-ALCOHOLIC FATTY LIVER DISEASE IN LATIN AMERICA

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