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Background: Co-infection with hepatitis A or B viruses may aggravate liver injury in hepatitis C virus (HCV) infected patients. However, few studies have assessed hepatitis E virus (HEV) and HCV coinfection.

Aim: Our goal was to assess the prevalence and impact of HEV infection among Brazilian patients with chronic hepatitis C virus.

Methods: This cross-sectional study included adult patients with chronic HCV infection, naïve to antiviral therapy. Prospectively and consecutively recruited from January 2013 to March 2016. 181 patients were enrolled and HEV serology and PCR were performed for all patients.

Results: Seropositivity for anti-HEV IgG was detected in 22 (12.0%) and for anti-HEV IgM in 3 (1.6%) patients. HEV RNA was inconclusive in 9 (4.9%) and undetectable in the remaining cases. HEV serology positive cases had more severe liver disease, characterized by liver fibrosis ≥3 vs ≤2 (p<0.001), APRI (≥1.45) (p=0.003) and FIB-4 (≥3.25) (p=0.001), respectively. Additionally, the odds of diabetes mellitus for HEV positive patients was 3.11 (95%CI 0.99-9.97) times the corresponding odds for HEV negative patients. Furthermore, HEV positive patients had significantly lower survival when compared to their HEV-negative counterparts (p=0.0016 for death and p=0.0067 for death or transplantation endpoint).

Conclusions: Although seroprevalence of HEV was low, this infection may influence the severity of liver disease and may represent an additional risk for developing diabetes mellitus in HCV patients.

Key-words: Hepatitis E, Chronic hepatitis C, Diabetes mellitus, Liver fibrosis, Cirrhosis, Seroprevalence

Table 1
Demographic, clinical, and laboratorial exams characteristics of subjects with anti-HEV positive and negative antibodies.

	HCV group		HEV-HCV group		
Variable	n/total	mean±SD[‡] or %	n/total	mean±SD[‡] or %	*P* value
Age (years)	157	52.5±12.9	24	57.0±10.4	0.070
Male	73/157	47%	9/24	38%	0.546
Weight (kg)	150	71.8±15.3	23	73.4±23.3	0.757
Height (cm)	148	164.5±9.9	23	161.2±12.7	0.243
BMI[a] (kg/m^2)	148	28.5±5.1	23	27.9±6.8	0.343
Arterial hypertension	68/151	45%	13/23	57%	0.421
Diabetes mellitus	32/151	21%	12/23	52%	0.003*

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P-6 SOFOSBUVIR CONTAINING REGIMENS ARE SAFE AND EFFECTIVE IN ADOLESCENTS WITH CHRONIC HEPATITIS C INFECTION

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Background: HCV-specific DAAs have transformed treatment of chronic HCV, but few studies have evaluated these therapies in children.

Methods: Patients aged 12–17 years old with chronic GT1 HCV were enrolled into an open-label study to receive 12 weeks of LDV/SOF 90 mg/400 mg once daily, and those with HCV GT2 or GT3 to receive SOF (400 mg once daily) + RBV (15 mg/kg/day) for 12 (GT2) or 24 weeks (GT3), respectively. Primary efficacy endpoint was SVR12. Safety was assessed by adverse events and clinical/laboratory data. Pharmacokinetic (PK) sampling was conducted to confirm the appropriateness of the doses.

Results: 150 adolescents (100 GT1, 13 GT2 and 37 GT3) were enrolled and treated. The majority were female (56%), white (90%), treatment naive (81%), and vertically infected (80%). The mean age was 15 years (range 12–17). LDV, SOF and GS-331007 (primary metabolite) exposures were within the range of adult exposures observed in the SOF and LDV/SOF phase 2/3 studies. The SVR12 rate was 98% in GT1, 100% in GT2 and 97% in GT3; all 3 patients who were considered not to have achieved SVR12 were lost to follow-up. No adverse event (AE) leading to study drug discontinuation or serious AEs have been reported.

Conclusion: In adolescents, LDV/SOF for 12 weeks and SOF + RBV for 12 or 24 weeks, resulted in a SVR12 rate of 97–100% with no virologic failures. These regimens were well tolerated, demonstrating their potential as an important treatment option for children with HCV infection.

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