Autoimmune hepatitis (HAI) is likely induced by Epstein Barr Virus (EBV) infection

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Introduction and Objectives: HAI is an immune-mediated chronic inflammatory liver condition of uncertain etiology. There are genetic factors and triggering agents such as toxicity, infections, and medications, among others.

Case summary: An 18-year-old woman with nausea, vomiting, abdominal pain and jaundice, positivity for Hepatitis A IgM (IGM-HAV). PCR SARS COV 2 negative, creatinine 0.56, FA 297, GGT 463, DHL 756, INR 1.4 BT 5.32, BI 2.87, BD 2.45, ALB 3.57, AST 136, ALT 135, Hb 8.9, Neutrophils 500. Hematology concludes with hemophagocytic syndrome (SH). HCV AND HBV negative, IGG 1560, ANTI DNA 108, ANA 1:80, IGM-HAV reactive, EBV 29.9125 copies/ml. Cyclosporine is administered by SH. 10 months after she is assessed in the liver clinic for the persistence of transaminasemia. By ultrasound hepatosplenomegaly, without dilation of the bile duct. Liver biopsy reported inflammatory infiltrate of periportal predominance with interface activity, macrovesicular steatosis, without fibrosis, without hemophagocytosis, with biochemical and histological data compatible with HAI with a simplified score of 7 points. (Fig. 1).

Discussion: HAI is associated with positive autoantibodies, hypergammaglobulinemia and necro inflammatory features in histology. HAV and EBV can induce HAI, as it induces autologous antibodies against triose phosphate isomerase. The patient has complicated EBV infection with SH and persistence of IGM-HAV for 11 months. Liver biopsy with autoimmune hepatitis data, probably as a result of EBV infection and false positive for IgM-HAV for EBV coinfection.

Conclusion: A woman with EBV, probable false-positive HAV and EBV-induced HAI is reported.

Funding: The resources used in this study were from the hospital without any additional financing

Declaration of interest: The authors declare no potential conflicts of interest.

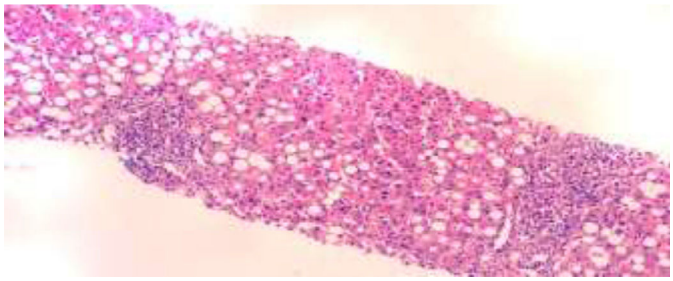

Figure 1. Liver histological cut with hematoxylin eosin 100x. predominantly lymphoid, moderate, portal inflammation with interphase and lobular activity in addition to moderate macrovesicular steatosis.

https://doi.org/10.1016/j.aohep.2022.100819

Reactivation autoimmune hepatitis report of two cases

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Introduction and Objectives: To present two clinical cases of patients with autoimmune hepatitis (AIH). After infection by SARS-COV2, presented reactivation of the disease.

Materials and methods: 42-year-old female with a history of celiac disease, choledocholithiasis, Arterial hypertension and CACU. Autoimmune hepatitis since 2012 treated with Prednisone, ursodeoxycolic acid and mycophenolic Ac. In March 2022, she presented infection by SARS COV-2 and relapse of AIH due to elevated transaminases; remission was reinduced with prednisone, showing biochemical improvement

48-year-old male history of psoriasis diagnosed with AIH in 2018 under treatment with Prednisone and Azathioprine. In February 2022, he presented a serious infection by SARS-Cov 2, restarting the remission reinduction scheme with prednisone and Azathioprine.

Discussion: In the bibliography consulted, there are no reports about the reactivation of the disease after infection by SARS-CoV-2, although there is a case report for autoimmune hepatitis and an autoimmune hepatitis overlap syndrome/primary biliary cholangitis triggered by COVID-19.

Conclusions: The spectrum of affectations after the pandemic by SARSCOV-2 is still wide, so we consider it important to expose these cases where the history of the infection in the face of an exacerbation by SARSCOV-2; in our experience, remission was reinduced with prednisone and azathioprine of according to international schemes, with good response from patients. We consider it important to report these cases since there is an association between AIH and viral infections such as Epsteinbar, so there may be a clear association between Sarc-cov2 infection and relapse.

Funding: The resources used in this study were from the hospital without any additional financing

Declaration of interest: The authors declare no potential conflicts of interest.

Table 1. Biochemical characteristics of the two patients

Patient 1 Date	AST	ALT	IgG	Alkaline phosphatase	BT	platelets
04.11.21	26	48	2765	101	0.5	233
10.03.22	756	1204	4276	183	4.6	200
24.03.22	281	800	4544	174	2.7	35
Patient 2						
25.11.21	102	130	2292	X	1.1	85
28.03.22	638	731	3577	138	10.1	94

https://doi.org/10.1016/j.aohep.2022.100820

Overlay of autoimmune cholangitis and autoimmune hepatitis

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Introduction and Objectives: The "overlap syndrome" is a variant of autoimmune hepatitis (AIH) in addition to cholestatic liver disease. AIH can present concurrently with primary biliary cholangitis (PBC) 7% to 13%, primary sclerosing cholangitis (PSC) 6% to 11% or autoimmune cholangitis (AIC) 3% to 9%, the rarest and associated with a poor prognosis. Diagnosis requires biochemical alteration, immunological studies and biopsy, plus the exclusion of viral, toxic, metabolic and hereditary etiologies. Therapy, including corticosteroids, ursodeoxycholic acid and

immunosuppressants, should be individualized and guided by the severity of the cholestasis findings.

Materials and Methods: 66-year-old female. She presented in 2018 with the detection of hepatic steatosis, a weight loss of 32 kg in 2 years. Asthenia, adynamia, pruritus and scleral jaundice progressing to generalized. In laboratories: BT 11.37 (BI 8.5), AST 187, ALT 148, GGT 1761, FA 1819, ANAs positive anti centromere 1:40 and Hep-2 cells 1:640, cholangioresonance without data of CEP. Treatment with ursodeoxycholic acid was started, with no response, and a liver biopsy was performed compatible with HAI+CAI, Fig. 1 and 2. We started therapy with prednisone and azathioprine.

Conclusions: Recognizing that AIH and IAC are diseases with high morbidity that progress to chronic liver damage with fibrosis and cirrhosis, their early identification would help in the establishment of timely and effective treatment.

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Declaration of interest: The authors declare no potential conflicts of interest.

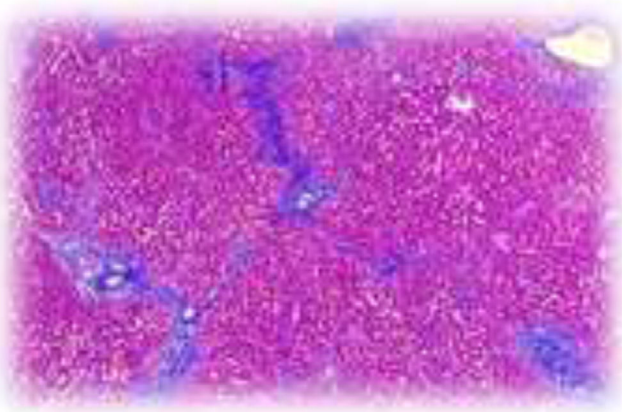

Fig.1: Masson's trichrome stain: fibrous portal expansion with the formation of incomplete portal-port bridges.

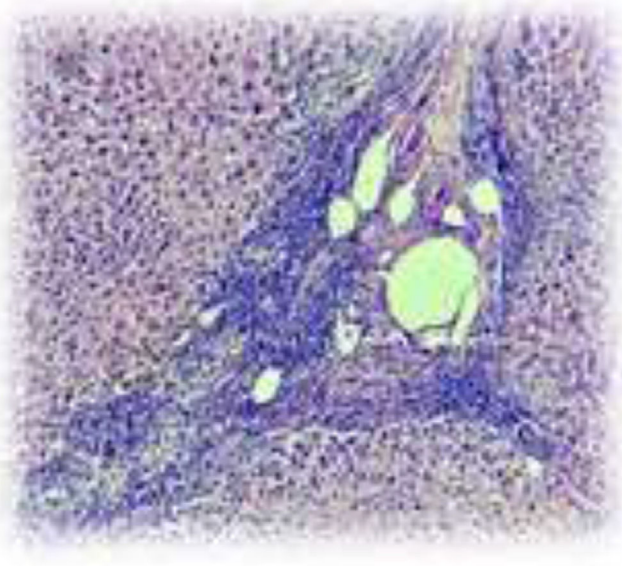

Fig. 2: No bile duct, granulomatous inflammation with inflammatory infiltrate predominantly lymphocytes, plasma cells and epithelioid macrophages that exceed the limiting plaque. Intracellular cholestasis.

https://doi.org/10.1016/j.aohep.2022.100821

Accuracy of NVP score as a predictor of gastroesophageal varices in primary biliary cholangitis

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Introduction and Objective: The presence of gastro-oesophageal varices (GOV) in patients with primary biliary cholangitis (PBC) denotes a poor prognosis and may precede jaundice and cirrhosis. The appropriate time to begin screening with oesphageo-gastro-duodenoscopy (OGD) is controversial. Recently, non-invasive tools such as GOV predictors in CBP, such as New Castle Varices PBC Score (NVP Score), are cost-effective. This study aimed to determine the accuracy of NVP Score as a predictive tool for GOV in PBC patients.

Materials and Methods: A Cross-sectional, retrospective, observational study of 47 PBV patients who underwent OGD as screening. NVP score was calculated and its accuracy, p-value and AUC were determined.

Results: 47 patients were included; 43 (91.4%) were female, with a median age of 59 years. Initially, 70% of PBC patients had GOV. NVP Score was calculated, with a cut-off of 0.3, establishing sensitivity of 100%, specificity of 50%, PPV of 82.5% and NPV of 100%, p=0.05.

Discussion: GOV prevalence in our population study is high (70%) even in early disease stages due to the presinusoidal component of portal hypertension and other factors. This evidence shows the importance of early GOV diagnosis in PBC patients, using non-invasive tools as a cost-effective strategy.

Conclusions: NVP score is a useful non-invasive tool that accurately predicts the presence of GOV in PBC patients.

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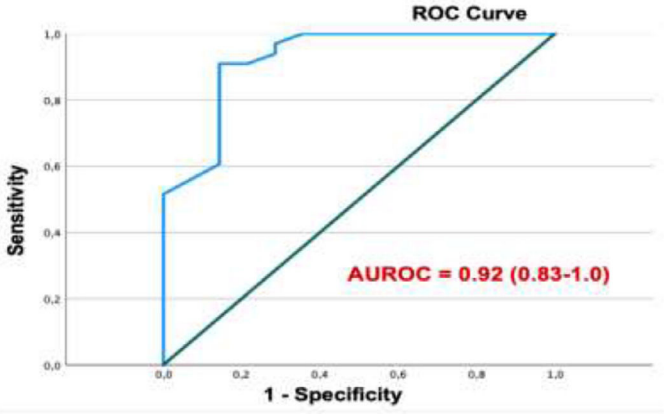

Fig. 1. ROC Curve of the NVP Score

https://doi.org/10.1016/j.aohep.2022.100822

Trends of autoimmune liver diseases in the University Hospital, UANL for 26 years. A single-center experience in Mexico

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