

From Hepatitis E to Autoimmune Hepatitis:
Aftermath of a trip to Qatar

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Introduction and Objectives: Autoimmune hepatitis (AIH) is a chronic immune-mediated disease with an estimated frequency of 11 to 25 subjects per 100 000 population. It has been reported that viral hepatitis can be a trigger for chronic active hepatitis with AIH criteria. Hepatitis E virus is infrequent in our environment, but it is recognized as the cause of about 20 million new infections per year, being described in case reports as a triggering factor of AIH.

Materials and Patients: We present the case of a 39-year-old woman who debuts with jaundice and general condition attack, this, 20 days after her return from Qatar, referring to have consumed raw meat during her stay, denying chronic degenerative history, alcohol and drug consumption. Liver function tests showed changes with R factor >5 compatible with hepatocellular pattern, liver ultrasound showed no liver or biliary changes. AgsVHB (-), HCV (-), VHA IgG (+), IgM (-), AC VHE IgG (-), IgM (+), immunoglobulins IgA 342, IgG 1777 U, IgM 97 U, negative ANA, AML, AMA, anti-LKM-1 antibodies were reported, which was considered probable acute hepatitis E. Cholangioresonance was performed due to the increase in bilirubin at the expense of direct bilirubin, confirming the absence of biliary tract changes.

Results: The patient was stable for 4 weeks with clinical improvement and a gradual decrease in bilirubin and transaminases, without evidence of liver damage or encephalopathy. After this period, the patient presented again with an abrupt rise in transaminases of more than 20 times the LSN. In view of these findings, an ultrasound-guided liver biopsy was performed. The histopathological report was consistent with autoimmune hepatitis, and treatment with prednisone and azathioprine was initiated, to which the patient responded favourably. The patient is currently asymptomatic and stable.

Conclusions: It is important to consider that acute hepatitis due to HEV is increasingly recognised, although sometimes misdiagnosed and confused with other liver diseases. It is also important to highlight that autoimmune diseases may be preceded by a viral infection due to an inadequate immune response, which forces us to highlight liver biopsy as a useful tool when serological markers are insufficient.

Ethical statement

The identity of the patients is protected. Consentment was obtained.

Declaration of interests

None

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Table 1.
Biochemical evolution

PARAMETRO	21.12.22	26.12.22	28.12.22	07.01.23	09.01.23	14.01.23	28.01.23	18.02.23	28.03.23
BT	8	16.3	7.56	3.2	14.31	2.21	1.9	0.89	0.91
BD	6.81	14.36	6.16	1.8	12.3	1.21	1.3	0.6	0.8
BI	1.19	1.94	1.4	1.4	2.01	1	0.6	0.29	0.11
AST	2749	2012	242	93	1649	250	234	40	25
ALT	3662	3017	1176	358	2687	562	211	88	28
FA	621	237	134	190	255	188	219	135	72
INR	1.27	1.47	1.2	1.23	1.54	1.05			

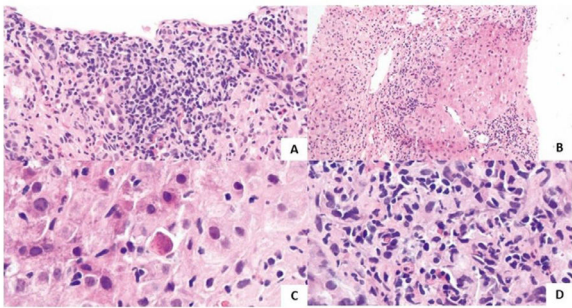


Image 1: **A)** The inflammatory infiltrate consists predominantly of lymphocytes with damage to the ductal epithelium, with occasional neutrophils. **B)** Identical fibrous dilatation of the portal spaces forming occasional porto-portal bridges. **C)** Necrotic hepatocytes and occasional lymphocytes in the cytoplasm of the hepatocytes (emperipolesis). **D)** Detail of the inflammatory infiltrate in the portal spaces, consisting of lymphocytes, isolated plasma cells and neutrophils.

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Characteristics of patients with overlap syndrome
of autoimmune liver diseases in a third level
hospital.

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Introduction and Objectives: Autoimmune liver disease is classified into 3 well-defined entities: autoimmune hepatitis, primary biliary cholangitis and primary sclerosing cholangitis, there is a group of patients who show characteristics of more than one entity and is called overlap syndrome (OS), according to the Paris criteria they are classified, the prevalence of overlap in our country is low. We describe the clinical and biochemical characteristics of patients with OS treated at the liver clinic at the Hospital General de México.

Materials and Patients: It is a retrospective and descriptive study, records of the autoimmune liver disease consultation were reviewed, searching for patients with OS using the Paris criteria in the period 2014-2023, descriptive statistics were performed with measures of central tendency and dispersion using SPSS 25.0.

Results: 22 patients were included, all of them with liver biopsy, 95% women aged 47 ± 12.6 years, the most common phenotype was PBC/HAI (59%). The time to diagnosis from initial manifestations ranged from 1 to 6 years, the most frequent tests were ANA (81%), AMA (63%), ASMA (18%) and LKM1 (18%), Immunoglobulin G levels on average 2048 ±643.8. The most frequent comorbidities were systemic sclerosis, arterial hypertension and hypothyroidism, the predominant symptoms were fatigue and pruritus reported in 36%; 90% were cirrhotic, Child Pugh A 70%, B 25% and C 5%. The most frequent decompensation was variceal hemorrhage (22.7%), 4.7% reported portal thrombosis, and 2 patients were transplanted.

Conclusions: Overlap syndromes are rare, we found the majority of patients are women with advanced stage of liver disease, the most frequent overlapping is PBC/HAI with a high proportion of positive serology tests and concordant biopsy, two patients underwent

liver transplantation. It is important to always look for this rare syndrome.

Ethical statement

The protocol was registered and approved by the Ethics Committee. The identity of the patients is protected. Consentment was obtained.

Declaration of interests

None

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Characteristics of patients with overlap syndrome of autoimmune liver diseases.		
Sex	Male	n = 21 (95%)
	Female	n = 1 (5%)
Phenotype	PBC/HAI	n = 13 (59%)
Antibodies	ANA	n = 18 (81%)
	AMA	n = 14 (63%)
	ASMA	n = 4 (18%)
	LKM1	n = 4 (18%)
Child-Pugh classification	Child-Pugh A	n = 14 (70%)
	Child-Pugh B	n = 5 (25%)
	Child-Pugh C	n = 1 (5%)

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Epidemiological changes in the incidence of acute liver failure at a hospital in Mexico City

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Introduction and Objectives: Acute liver failure is a condition that can rapidly progress to multiple organ failure. The main reported cause is paracetamol ingestion in 47%, followed by drug-induced liver injury in 11% and viral hepatitis in 10%. An increase in the incidence in our hospital and a change in the etiology were observed. This study aimed to determine the frequency and etiology of acute liver failure, presentation and outcome of patients in the last 3 years at Juarez Hospital of Mexico.

Materials and Patients: Retrospective, descriptive, observational, cross-sectional study. 20 files with a diagnosis of acute liver failure from May 2020 to May 2023 at Juarez Hospital of Mexico were reviewed. Epidemiological data, clinical manifestations, biochemical parameters, evolution and outcome of the studied population were obtained.

Results: 15 patients were included, 86.6% were male, 13.3% female, 73.3% of the patients were under 35 years of age. 66.6% were secondary to hepatitis A virus, 13.3% to drug-induced liver injury and 20% autoimmune. In the last 5 months, 53.3% of the cases were presented. 73.3% manifesting as hyperacute, 20% acute and 6.6% sub-acute. The pattern of presentation of liver injury was hepatocellular in 80% and mixed in 20%. 3 patients received liver transplant (20%), 5 received plasmapheresis (33.3%), and 7 patients received support measures (46.6%). Mortality was 20%.

Conclusions: An increase in cases of acute liver failure was determined in the last 5 months, all secondary to hepatitis A virus, with a hyperacute presentation pattern, all required intensive care management, with 100% survival in patients undergoing liver transplantation or plasmapheresis. Due to these findings, it is necessary to perform

multicenter studies to determine a change in the behavior of this virus.

Ethical statement

The protocol was registered and approved by the Ethics Committee. The identity of the patients is protected. Consentment was obtained.

Declaration of interests

None

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Utility of the MELD and MELD-Lactate scale in patients with severe Alcoholic Hepatitis as a predictor of severity and early mortality.

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Introduction and Objectives: Alcoholic Hepatitis (AH) causes acute inflammation of the liver. The prognosis depends on the recovery of the liver from rapid improvement to multi-organ failure and death. There are scales that establish the prognosis and respond to steroid in AH, based on biochemical markers, none uses lactate levels. The lactate level in a patient with hepatitis may be increased. To determine if the MELD-Lactate scale is better than MELD for predicting with greater accuracy the severity and early mortality in patients with Alcoholic Hepatitis.

Materials and Patients: Retrospective, retrospective and analytical study, from 2019 to 2022. The variables were obtained with laboratories upon admission, including lactate levels. The area under the curve for sensitivity and specificity was calculated for predictive scales and MELD-lactate to determine mortality at 28 and 90 days.

Results: Include 70 patients, 59 men (84.2%) and 11 women (15.7%), age 43.2 ±9.8 years. The mortality at 28 days was 19 patients (27.1%) and at 90 days it was 18 patients (25.7%), a total of 37 (52%). The area under the curve for MELD-Lactate was in general mortality 0.823; 0.705-0.941 (sensitivity 81.8% specificity 72.4%), at 28 days 0.874; 0.780-0.968 (sensitivity 88.9%; specificity 71.3%) and 90 days there was no significance, compared with MELD which was general mortality 0.741; 0.603-0.878 (sensitivity 81.8% specificity 66.1%), at 28 days MELD 0.766; 0.615-.916 (sensitivity 88.9% specificity 63.3%) and at 90 days there was no significance, with the rest of the scales (MELD 3.0, ABIC, Maddrey, MELD- Na and Glasgow, it was less than that of MELD-Lactate. (Figure 1,2).

Conclusions: Patients with severe AH have higher mortality, either early or late. In our study we showed that the MELD-lactate scale may be a better prognostic scale for early mortality in patients with alcohol hepatitis, since it showed a better performance than all the other scales used, although these results must be confirmed in other hospital centers, we can recommend their use.

Ethical statement

The protocol was registered and approved by the Ethics Committee. The identity of the patients is protected. Consentment was obtained.