serum concentration of sodium was <135 mEq/L in hypotonic state and water retention.

Results: The incidence of hyponatremia was 9.6% (13/135). A prognostic risk index was identified based on fluid retention and the baseline MELD score (RH-MELD Index) (Table 1). A higher incidence of hyponatremia was observed in patients in category III [RR: 7.96 (95%CI: 1.17-54.06, p=0.034)], when adjusting for diet; patients with protein supplement consumption without a structured diet had a higher risk of hyponatremia [RR: 17.72 (95%CI: 3.50-89.52), p=0.001)].

Conclusions: The results suggest that the incidence of dilutional hyponatremia in outpatients with cirrhosis is frequent; mild alterations in water retention and liver function in the compensated phase represent an early indicator of its development, which can be modified by the indicated diet.

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.

Table 1
RH-MELD Index.

Risk categories for Hyponatremia		
(RH-MELD) Categories	N (%)	P value
I: No water retention, MELD ≤9	2/62 (3.2)	Reference
II: Water retention or MELD ≥10	6/55 (10.9)	0.201
III: Water retention + MELD ≥10	5/18 (27.8)	0.010*

* Fisher exact test.

Unadjusted risk: RH-MELD I (reference), II (RR:3.67, CI 95%:0.71-19.01, p=0.121), III (RR:11.53, CI 95%: 2.01-66.13, p=0.006).

https://doi.org/10.1016/j.aohep.2024.101395

"Explosive" worsening of chronic hepatitis C-associated cryoglobulinemia vasculitis, as unmasking of lymphoma a case report.

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Introduction and Objectives: Hepatitis C virus (HCV)- related lymphoproliferative disease from cryoglobulinemia to B-cell non-Hodgkin lymphoma (B-NHL) through cryoglobulinemic vasculitis (CryoVas). The CryoVas is difficult to diagnose; once diagnosed, we must rule out the HCV infection. We presented a patient with HCV and CryoVas, which presented a sudden "explosive" worsening, warning about the development of a B-NHL.

Materials and Patients: 55-year-old male with HCV and CryoVas; what was the trigger for the diagnosis of HCV twenty years before? He received pegylated interferon and ribavirin without response. The virological, biochemical, and immunological characteristics are shown in Table 1. The flare of CryoVas appeared twice a year at most, limited to purpuric lesions on the legs, below the knees, arthralgia, and fatigue; was often triggered by infections, self-limiting throughout 2 to 3 weeks. The last flare started as usual but getting worse rapidly, spreading to the thighs, abdomen, chest, and upper extremities, plus fever, nocturnal diaphoresis, severe wasting, and inguinal, axillary lymph nodes. Lymph node biopsy shows diffuse large B-cell lymphoma (DLBCL)

Results: He received chemotherapy (CT), previously was re-treated with sofosbuvir/velpatasvir for 12 weeks. Five months after first-line treatment for DLBCL he presented an early relapse and received a second line of CT; at 3-year follow-up is in remission with no relapse of CryoVas, waiting for a bone marrow transplant.

Conclusions: Clinicians treating hepatitis C should be aware of the need to carry out immunological parameters at the basal evaluation, such as cryoglobulins, rheumatoid factor, C4 fraction, and even a flow cytometry in specific patients to the detection of leukemias and/or related lymphomas.

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
Viral, biochemical and immunological parameters during the HCV infection, CryoVas and B-LNH.

Variable	2006 year (y)	Basal 2019 y	SVR12	Last follow up 2022y
Viral load, UI/mL (log)	13466 (4.13)	867277 (5.94)	ND	NR
Genotype	1b	1b	NR	NR
Hemoglobin g/dL	9.9	10.6	12.8	13
Total leukocytes K/μL	NR	8.6	7.6	9
Total lymphocytes K/μL	NR	2.3	1.5	1.9
Platelets	152	88	80	122
AST	40	79	20	21
ALT	83	108	20	29
GGT	38	66	33	NR
LDH	130	370	180	100
AFP	1	2	3	2
FIB4	1.16	4.76	3	0.49
APRI	0.75	2.57	0.71	1.86
Crioglobulins	NR	Positive	NR	Negative

SVR12: Sustained viral response at 12 weeks after treatment, AST, Aspartate aminotransferasec ALT, Alanine aminotransferase; GGT, gamma glutamyl transpeptidase; LDH, lactate dehydrogenase; AFP, alpha-fetoprotein; ND, No detected.

https://doi.org/10.1016/j.aohep.2024.101396

Intrahepatic Cholestasis Induced by Leflunomide: An Unusual Presentation of DILI

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