

diagnosis in high-risk populations, even those that are routinely marginalized, could be more effective.

The authors declare that there is no conflict of interest.

Population	RT performed (%)	RT reactive (%)	PCR positive (%)
Total	297,397	13,085 (4.4)	9,426 (3.2)
General population*	245,156 (82.4)	9,023 (3.7)	6,225 (2.5)
Population in risk			
HIV	33,292 (11.2)	1,478 (4.4)	1,028 (3.1)
PWID	15,652 (5.3)	1,268 (8.1)	1,001 (6.4)
PRISON (CERESO)	2,392 (0.3)	1,098 (24.1)	1,005 (18.5)

RT: Rapid test. *General population with at least one risk factor. HIV: Subjects screened in HIV clinics. PWID: people who inject drugs. CERESO: State Center for Social Re-adaptation

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CLEAR CELL HEPATOCELLULAR CARCINOMA, A CASE REPORT

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Introduction and Objectives: Clear Cell Hepatocellular Carcinoma (CCHCC) represents 2.2 to 6.7% of all Hepatocellular Carcinomas (HCC), affects mostly women and is frequently associated with liver cirrhosis, viral infections (HBV, HCV), aflatoxins, hemochromatosis, oral contraceptives, obesity and type 2 diabetes mellitus. The most frequent manifestation is a solitary tumor with a pseudocapsule, which is more frequent than in other subtypes of HCC. Histologically, CCHCC can be observed as cells with an empty appearance with abundant cytoplasm, vacuolated and foamy due to the accumulation of glycogen and fat, constituting more than 50% of the total cells. Differential diagnosis with liver metastases can be difficult, so immunohistochemistry is an important diagnostic tool.

Clinical Case: 69-year-old female with a history of hepatitis C virus infection in 2018 receiving direct-acting antiviral treatment for 12 weeks with sustained viral response-12, Child Pugh B liver cirrhosis is documented. 2 years later, the follow-up ultrasound reports liver injury cystic and alpha-fetoprotein at 84.27 ng / ml, so a triphasic tomography was performed, observing liver lesion in segment VII of 35 × 27 × 31 mm suggestive of hepatocellular carcinoma with atypical characteristics, no tumors were reported in another abdominal site, as there was no conclusive radiological criterion for hepatocellular carcinoma, a liver lesion biopsy was performed with a histological report of moderately differentiated clear cell carcinoma and immunohistochemistry with Hepatocyte antigen positive, Carcino-embryonic antigen negative, internal Arginase 1 positive, Glypican 3 positive and Internal renal carcinoma antigen negative, concluding diagnosis of clear cells hepatocellular carcinoma T1B, N0, M0, therefore the patient was referred for transarterial chemoembolization of the lesion.

Discussion: The importance of the current report is to identify histopathological characteristics and establish the usefulness of Immunohistochemistry to make a differential diagnosis with other tumors that can metastasize to and be confused with a primary CCHCC of the liver.

Conclusions: CHCC is a rare subtype of HCC with a more favorable prognosis than other forms of hepatocellular carcinoma, the histological differential diagnosis through immunohistochemistry should be performed with renal cell carcinoma, adrenal cortical carcinoma, clear cell sarcoma, angioliomas, pulmonary and neuroendocrine clear cell variant, which can metastasize to the liver and be confused.

The immunohistochemical study was decisive for the treatment and favorable prognosis of the patient.

The authors declare that there is no conflict of interest.

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FRUCTOSE DIET INDUCES A METABOLIC REPROGRAMMING TO ENHANCE TUMOR AGGRESSIVENESS

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Introduction and Objectives: HCC is one of the main causes of cancer-related death worldwide and has third place in mortality. One of the main risk factors is metabolic-associated fatty liver disease (MAFLD), having hepatic steatosis, and related metabolic disorders. Mexican population has the highest obesity rate in both children and adults, and the consumption of hypercaloric diets has been related to that. Also, Mexico is in the top five countries with a higher fructose-enriched diet consumption and has been proved already the relation between fructose consumption and MAFLD. Likewise, fructose has been related to metabolic rewiring in transformed cells, enhancing aggressiveness and survival.

Aim: To analyze fructose role on aggressiveness promotion of HCC cells.

Materials and Methods: We used C57Bl/6J mice strain (both sex) with a high Fructose diet (Fru) (33% of fructose in the drinking water, *ad libitum*). Fru supplementation started with 15 days-old mice, two days after DEN was injected (10 µg/Kg, i.p), and the treatment was ended 8 months later. The UAM ethics committee approved the protocol. *In vitro* studies were carried out with the Huh-7 HCC cell line and we evaluated metabolic and biochemical parameters.

Results: Tissue samples were analyzed by H&E. We observed that the fructose-enriched diet group mice presented fat accumulation in the hepatocytes and also areas with a greater inflammatory infiltrate (Fru). Mice in the fructose-enriched diet + DEN (Fru/HCC) group showed a marked difference between the tumor area and the surrounding tissue and an increase in the number of bile ducts, indicating liver tissue damage. Also, we analyzed the protein content of some lipogenic enzymes and noticed an increment in fatty acid synthase (Fasn) in Fru and Fru/HCC. Due to that, we analyzed if Fru treatment was inducing metabolic rewiring in transformed cells. We obtained metabolic changes in fructose-treated cells, reducing the