Introduction and Objectives: Patients diagnosed with viral hepatitis often fail to follow up, a problem exacerbated by the pandemic. The "relink" strategy aims to reconnect these patients to ensure they receive the necessary follow-up and treatment.

The objective of our work was to generate a PANRELINK program based on the analysis of blood samples tested for HBsAg and anti-HCV antibodies from the reference laboratory database at Hospital El Cruce and to implement a relink strategy for patients with positive results.

Patients / Materials and Methods: We analyzed the results of blood samples tested for HBsAg and HCV antibodies by chemiluminescence, conducted at the reference laboratory from 2012 to 2022. Samples were stratified by origin (primary care centers [CAP] vs. medium and high complexity hospitals [MHC]). Statistical analyses chi-squared and t-tests.

Results and Discussion: A total of 108,261 blood samples were tested for HBsAg, with a test positivity rate (TPR) of 0.28% (306/108,261). For HCV, 106,917 samples were tested, with a TPR of 1.09% (1,162/106,917). When stratified by sample origin, TPR for HBsAg was 0.11% (101/86,609) in CAP and 0.96% (205/21,652) in MHC ($p<0.001$). For HCV, TPR was 0.43% (384/88,625) in CAP and 4.34% (778/17,130) in MHC ($p<0.001$). Among HBsAg-positive patients, 11% (34/306) were already in treatment at the time of relink, 16% (49/306) had died, 11% (33/306) were acute cases, and 52% (163/306) were potential candidates for relink. Among HCV-positive patients, 21% (242/1,162) had been treated, 25% (289/1,162) had died, 6% (67/1,162) were in treatment at the time of relink, 2% (26/1,162) were false positives, and 46% (538/1,162) were potential candidates for relink. In HCV-positive patients, a relink program was implemented. The phone contact rate with patients for reconnection was 16% (86/538) on the first call. The low contact rate was due to phone number changes. The attendance rate was 70% (60/86).

Conclusions: The study reveals that a significant proportion of patients with viral hepatitis do not receive adequate follow-up, highlighting the need for effective reconnection strategies. The PANRELINK strategy was effective in identifying patients from laboratory records. This PANRELINK modality can serve as a replicable high-volume model in other health contexts, improving long-term health outcomes and reducing the disease burden. Addressing communication barriers, such as phone number changes, is crucial to improve contact and attendance rates in future reconnection initiatives.

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O-12 DECIPHERING WILSON'S DISEASE IN COSTA RICA: AN INNOVATIVE GENETIC APPROACH

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Conflict of interest: No

Introduction and Objectives: In a recent article from the American Journal of Human Genetics, the genetic behavior of variants associated with Wilson's Disease (WD) is analyzed, alongside the worldwide discovery of the responsible gene. The variant c.3809A>G (p.Asn1270Ser) is highlighted, with a prevalence of 61% in Costa Rica, differing from that observed in Europe and the United States, and originally described in Sicily. The Genetics Center of the National Children's Hospital has been instrumental in identifying a specific genetic pattern among Costa Ricans with WD. Additionally, a novel worldwide variant in heterozygosity has been discovered in Nicaraguan patients, solidifying Costa Rica as a country with a high incidence of WD and significant contributions to the genetic study of the disease, which has documented over 1161 pathogenic variants. Objective: To analyze and describe the genetic spectrum of these variants in Costa Rica over the past two years, aiming to establish a comprehensive genetic map in a population with a high incidence of WD.

Patients / Materials and Methods: Molecular Sequencing (Sanger NGS) for molecular confirmation, as well as MLPA techniques and Copy Number Variations (CNVs) analysis.

Results and Discussion: During the period (2022-2023), 86 patients with WD variants were identified, including 19 homozygotes, 11 compound heterozygotes, and 56 carriers. There was a significant gender distribution, with a female predominance among homozygotes (58%) and male predominance among compound heterozygotes (64%). The ages of the patients varied widely, with an average age of 20 years for homozygotes and 21 years for compound heterozygotes. Multiple genetic variants were identified in genes such as ATP7B, including p.N1270S and others.

Conclusions: The importance of genetic research in understanding complex hereditary diseases like WD is underscored. The high prevalence of the c.3809A>G variant in Costa Rica highlights regional genetic diversity and the need to adapt diagnostic and treatment strategies to the specific genetic characteristics of each population.

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OP-13 CHOLANGIOCARCINOMA IN LATIN AMERICA: A MULTICENTER OBSERVATIONAL STUDY ALERTS ON ETHNICAL DISPARITIES IN TUMOR PRESENTATION AND OUTCOME

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Conflict of interest: No

Introduction and Objectives: Cholangiocarcinoma (CCA) represents a global health challenge, with rising incidence and mortality

rates. This study aimed to elucidate the clinical course and practices of CCA in Latin America.

Patients / Materials and Methods: This observational cohort study investigated individuals diagnosed with CCA between 2010-2023 in five referral centers across Latin America. Demographic, biochemical, and clinical data were analyzed.

Results and Discussion: A total of 309 patients were enrolled, demonstrating a balanced distribution of CCA subtypes (intrahepatic, perihilar, and distal), with Hispanics and Caucasians as the predominant ethnic groups, followed by Africans. Major risk factors identified included age, diabetes, obesity, MASLD, bile duct stones, and cholecystitis. Disparities in overweight/obesity prevalence were noted among CCA subtypes and ethnicities, with higher rates in extrahepatic CCAs and among Hispanics and Caucasians. At diagnosis, 72% of patients had ECOG-PS scores of 0-1, with disease presentations ranging from localized (47%) to locally advanced (19%) and metastatic (34%). Patients who did not receive any anti-cancer therapy exhibited a median survival of 2.3 months. Survival rates significantly improved across treatment modalities, with surgery yielding the longest (34 months), followed by chemotherapy (8 months). Notably, Africans presented with worse ECOG-PS scores and more advanced disease, while Hispanics were less frequently treated with chemotherapy, contributing to lower survival rates.

Conclusions: The high prevalence of late-stage CCA diagnosis in Latin America, particularly among Africans, alongside a substantial proportion of Hispanic patients not receiving chemotherapy, underscores a dismal prognosis for patients. These findings highlight structural challenges in cancer screening and healthcare access among diverse ethnic backgrounds and lower socioeconomic statuses in the region. Urgent measures are warranted, including identifying preventable risk factors, increasing awareness among high-risk populations, and establishing equitable health coverage to address these disparities.

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OP- 14 ENHANCED MUSCLE MASS MITIGATES MASLD IN MYOSTATIN KNOCKOUT MICE WITHOUT IMPACTING EXERCISE PERFORMANCE

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Conflict of interest: No

Introduction and Objectives: Metabolic Dysfunction-Associated Steatotic Liver Disease (MASLD) is linked to sarcopenia and exacerbated by obesity. Individuals with higher relative skeletal muscle mass are protected against MASLD or more likely to see its resolution, regardless of demographic and health-related factors. This study examines the effects of muscle mass enhancement, independent of exercise, on MASLD progression using myostatin knockout (Mstn-KO) mice, which are genetically modified to exhibit increased muscle mass due to myostatin deficiency.

Patients / Materials and Methods: 11-week-old Mstn-KO mice and their wild-type counterparts were fed a Western diet (WD) for 24 weeks to induce MASLD. Parameters assessed included liver steatosis through histological analysis, muscle mass via MRI and histological cross-sectional area, exercise performance through treadmill tests, and muscle strength measured by electrophysiology.

Results and Discussion: Mstn-KO mice showed significantly reduced liver steatosis (-20%) and increased muscle mass (+30%) compared to wild-type controls. Additionally, liver pro-inflammatory cytokines such as IL-1β and TNF-α were decreased in Mstn-KO mice, along with lower expression of lipogenesis-related genes, indicating a protective effect against MASLD progression. Histological assessments showed less hepatic lipid accumulation and inflammation in Mstn-KO mice, correlating with decreased myosteatosis and an enhanced cross-sectional area of muscle fibers. Muscle mass was measured by bioimpedance analysis, and paravertebral muscle area was evaluated using MRI. Electrophysiological measures indicated increased tetanic strength in Mstn-KO mice. Despite these physiological improvements, treadmill test results did not show significant differences in exercise performance between Mstn-KO and wild-type groups, suggesting that muscle mass improvement did not translate into enhanced exercise capacity. These results indicate that Mstn-KO mice are protected against muscle atrophy and MASLD progression.

Conclusions: Our findings suggest that increased muscle mass, independent of exercise performance, can significantly ameliorate MASLD histology. Mstn-KO mice serve as a valuable model for exploring muscle-liver crosstalk in liver diseases, indicating potential treatment pathways that do not rely on exercise enhancement.

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OP- 15 OUTCOME OF PREGNANCIES IN A SERIES OF WILSON DISEASE PATIENTS

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Conflict of interest: No

Introduction and Objectives: Wilson disease (WD) is an inherited disease that mainly affects the liver and brain due to copper overload. Pregnancy in WD is a challenging situation. Our aim was to analyze the clinical aspects and outcomes of pregnancies in WD.

Patients / Materials and Methods: In a series of 289 WD cases (1963-2024), we reviewed the medical records of 123 women, 26 of whom became pregnant at least once (1-5). A total of 52 pregnancies were recorded, but 3 were excluded because data on the conceptus were missing. Pregnancy outcomes were correlated with disease severity and anti-copper medication. Hepatic and/or neuropsychiatric manifestations were categorized as 1) asymptomatic/mild or 2) moderate/severe. Pregnancy outcomes were considered 1) successful