survival rates in advanced liver conditions, underscoring the need for improved monitoring and therapeutic interventions within the Colombian healthcare system. Future research should focus on developing effective healthcare strategies to enhance outcomes in these populations.

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P-29 DIFFERENCES IN THE PROGRESSION OF BODY COMPOSITION AND LIVER DAMAGE IN A MURINE MODEL OF METABOLIC SYNDROME: A SEX PERSPECTIVE

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Conflict of interest: No

Introduction and Objectives: The Metabolic dysfunction associated with fatty liver (MAFLD) is the most common hepatic affection worldwide[1]. The critical pathophysiological hallmark of MAFLD is the hepatocyte's accumulation of intracellular fats[2].

The gold standard for diagnosing MAFLD is liver biopsy; however, this method is invasive and cannot be used to follow the progression of the disease. On the other hand, changes in total weight and body fat distribution can be used for clinically suspected indicators of MAFLD progression[3,4]; however, sex dependence is not completely elucidated.

This study aims to investigate the sex differences in body composition changes and their relationship with liver disease progression in the eNOS KO. The eNOS KO is a metabolic model of MAFLD and recapitulates the disease in 8-12 weeks when fed a high-calorie and high-fat diet[5].

Patients / Materials and Methods: We fed 8 groups of 12-week-old eNOS KO mice for 0 weeks (n=6), 4 weeks (n=6), 8 weeks (n=6), and 12 weeks (n=6)

At each time point, an in vivo MRI imaging of body composition and Dixon Quant quantification were acquired using a Philips Ingenia 3T MR scan. We harvested the liver each time for histology analyses and obtained plasma for serological measurements.

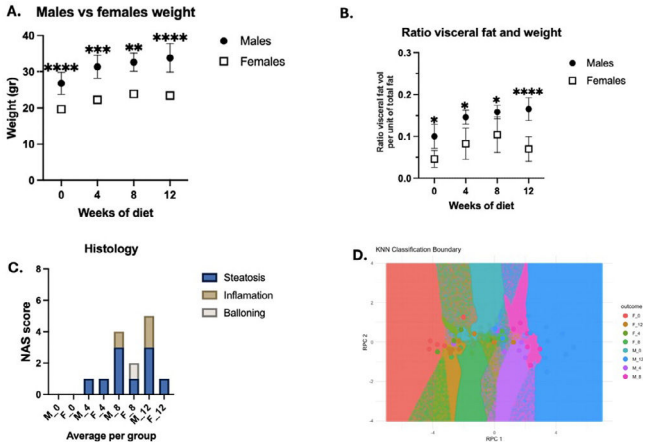
All data were analyzed using no parametric statistics in Prism 9.0.0 (GraphPad Software Inc, La Jolla, CA). Principal Component Analysis (PCA) statistical package R v4.0.2.

Results and Discussion: Males and females increased their weight during the diet intervention (23% males, 13% females, fig. 1A); however, both groups ate a similar amount of food. Males showed greater visceral fat accumulation than females throughout the intervention period; when we adjust for body weight, males have a significantly higher proportion of visceral fat volume per unit of mass than females (fig. 1B).

During the dietary intervention, the mice showed a progressive increase in the NAS score, with females reaching a maximum score of 3 and males reaching 5 (fig. 1C).

Using the dimensionality reduction technique and the KNN classification boundary, it was possible to demonstrate that the animals are grouped according to the progression of the disease but also grouped by sex (fig. 1D).

Conclusions: The progression of MAFLD showed different phenotypes in males and females. Using markers from body composition, liver and muscle fat fraction, it was possible to identify sex-dependent clusters that correlate with the liver damage progression. Our results suggest the need to identify diagnostic and progression markers of MAFLD differentiated by sex.



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P-30 NURSING EXPERIENCE IN THE ONLY ADULT-TO-ADULT LIVING DONOR LIVER TRANSPLANT PROGRAM IN COLOMBIA

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Conflict of interest: No

Introduction and Objectives: Fundación Cardioinfantil is the only healthcare institution (IPS) in Colombia registered at the national level to perform adult living donor liver transplants (THADV). The low availability of deceased donors and the high mortality rate on the waiting list motivated the creation of the program. Nursing plays a fundamental role in promoting and educating the living donor and their family, which is essential for the program's success.

To describe the nursing experience and evaluate the quality of education provided to living donors in the adult liver transplant program at Fundación Cardioinfantil, Colombia.

Patients / Materials and Methods: A descriptive observational study was conducted in the THADV program, which included the review of nursing education records of donors studied between 2017 and 2023. Quantitative and qualitative data were analyzed using R-Studio software to assess the understanding of the information, motivations for donating, and educational needs.

Results and Discussion: A total of 187 donors were studied. 97% adequately understood the education provided regarding anatomy, donation process, evaluation, and motivation. Only 3% of the donors studied required re-education. Among the donors studied, the male gender represented the highest percentage of donations at 51.87%. The median age was 31.9 years, and the most prevalent relationship was "son/daughter" at 59%. Lastly, the primary motivation for donating was love for a loved one and improving their quality of life.

Conclusions: The education provided by the nursing staff to potential donors in the first THADV program in Colombia is effective, well-regarded, and crucial for the program's long-term success and sustainability.

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P-31 ACUTE LIVER FAILURE DUE TO WILSON'S DISEASE IN COSTA RICA: A LOOK AT GENETICS

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Conflict of interest: No

Introduction and Objectives: Acute liver failure (ALF) can be defined as a complex clinical syndrome characterized by coagulopathy, alteration in liver biochemistry and encephalopathy in a patient without underlying chronic liver disease. An exception occurs in patients with Wilson's Disease (WD) manifested precisely by ALF. Costa Rica is known as a country with a high incidence of WD, a pioneer in the study of the genetics of this disease, documenting more than 1,161 pathogenic variants. Taking advantage of the work of the genetics laboratory of the National Children's Hospital, we undertook the task of assessing the genetic spectrum of patients with FHA due to Wilson in the last 2 years in our country. *Objective*: To analyze and describe the genetic spectrum of acute liver failure due to WD in Costa Rica during the last two years.

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

Results and Discussion: During the period (2022-2023), 86 patients with WD variants were identified, of which 30 had confirmatory genetics of the disease. 4 of them presented as having FHA, being managed with a liver transplant, and to this day all of them are alive. It was evident that 100% of the patients presented the c.3809A>G variant, with half of the patients being homozygous and the other half being c.3207C>A / c.3809A>G compound heterozygotes.

Conclusions: The c.3809A>G variant was found in all patients who presented ALF due to Wilson's disease in Costa Rica in the last 2 years. There is a lack of studies that assess the association between this variant and more aggressive presentations of the disease, however these results allow us to open a debate about the study of genetics as a predictor of ALF due to WD.

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P-32 ACCESSIBILITY TO SEQUENTIAL SYSTEMIC TREATMENT AFTER TACE: IMPACT ON SURVIVAL IN A LATIN AMERICAN PROSPECTIVE COHORT

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Conflict of interest: No

Introduction and Objectives: Stopping rules following transarterial chemoembolization (TACE), either tumor progression or “unTACEable” progression are needed. Avoiding liver decompensation after TACE may lead better access to systemic treatment and survival. These scenarios are unknown in our region. We aimed to evaluate accessibility to systemic therapy following TACE and its impact on survival.

Patients / Materials and Methods: A multicenter prospective cohort study conducted in Latin America, included HCC patients receiving TACE from May 15, 2018 to March 15, 2024. We excluded patients on the liver transplant waiting list, or Child Pugh C. Survival since first TACE was compared between groups accessing (A) and not accessing (no-A) to systemic therapy after TACE through Cox proportional hazard survival analysis, and adjusted treatment effect was further evaluated using a propensity score (PS) and inverse probability treatment weighting (IPTW).

Results and Discussion: rom 258 receiving TACE, 188 were included after excluding 33 patients on the waiting list and 37 Child C (Table). Access to any systemic therapy was 46.8% (95% CI 39.5-54.2%), within a median time from TACE to first line of 9 months (range 3.7-17.0). In group A (n=88) systemic treatments following TACE were sorafenib 62.5%, atezolizumab + bevacizumab 31.8%, and lenvatinib 4.5%. Paradoxically, while presenting better liver function reserve, liver decompensation after TACE was more frequent in group A (7% vs 0%; P=0.004), without significant differences regarding median number of TACEs, modality, or tumor burden. Median survival since first TACE between groups was A 37.4 months vs no-A 29.8 months [HR 0.69 (95% CI 0.44-1.10), adjusted for the HAP score (Figure), which was unchanged after PS and IPTW.