

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.

<https://doi.org/10.1016/j.aohep.2024.101642>

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

Laura Manjarrés¹, Aline Xavier², Leticia González¹, Camila Garrido¹, Flavia Zacconi³, Carlos Sing-Long¹, Marcelo Andia¹

¹ Biomedical Imaging Center, Radiology Department, School of Medicine, Pontificia Universidad Católica de Chile, Santiago, Chile, Santiago, Chile

² Biomedical Engineering, School of Engineering, Universidad de Santiago de Chile, Santiago, Chile, Santiago, Chile

³ Faculty of Chemistry and Pharmacy, Pontificia Universidad Católica de Chile, Santiago, Chile, Santiago, Chile

Conflict of interest: No

Introduction and Objectives: The Metabolic dysfunction associated with fatty liver (MAFLD) is the most common hepatic affection worldwide¹. The critical pathophysiological hallmark of MAFLD is the hepatocyte's accumulation of intracellular fats².

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 diet⁵.

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 non-parametric statistics in Prism 9.0.0 (GraphPad Software Inc, La Jolla, CA). Principal Component Analysis (PCA) statistical package R v4.0.2.

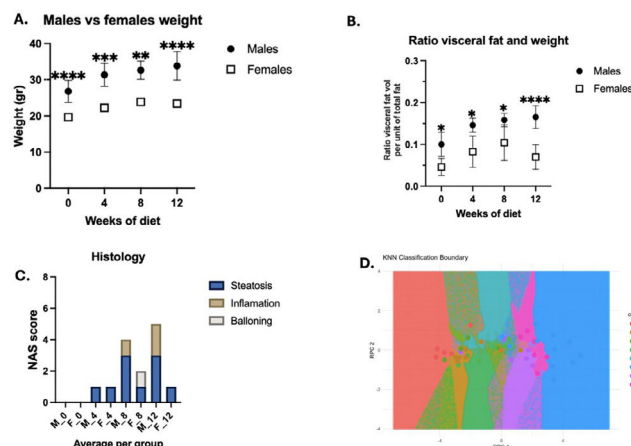
Results and Discussion: Males and females increased their weight during the diet intervention (23% males, 13% females, fig. 1A); however, both groups ate a similar amount of food. Males showed greater visceral fat accumulation than females throughout the intervention period; when we adjust for body weight,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



<https://doi.org/10.1016/j.aohep.2024.101643>

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

ANA MARÍA MARTINEZ CAMARGO¹, Yesica Juliana Castellanos Menjura¹, Lina Marcela Ruiz Ramírez¹, Angélica María Sanabria Jiménez¹, Gilberto Andrés Mejía Hernández¹, Adriana Varón Puerta¹

¹ FUNDACIÓN CARDIOINFANTIL, Bogotá, Colombia

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.