Abstract title (max. 25 words):

Different risk factors of hepatic steatosis and fibrosis in type 2 diabetes: A cross-sectional study in Eastern Chinese populations

Abstract (max. 300 words):

Aim: This multicenter study aimed to delineate whether hepatic steatosis and fibrosis in type 2 diabetes (T2DM) are mediated by diabetes-specific metabolic perturbations or confounded by overlapping risk factors, through stratified subgroup analyses.

Method: A cross-sectional registry enrolled 1,513 T2DM patients from 16 Chinese centers (2022–2023). Clinical, laboratory, and elastography data were analyzed. Group comparisons utilized Student’s t-test, Mann-Whitney U test, or Chi-squared/Fisher’s exact tests. Risk factors were identified via single- and multi-variable logistic regression.

Results: Hepatic steatosis prevalence was 69.7%, fibrosis 34.6%, with 32.5% exhibiting both. Steatosis correlated strongly with obesity (e.g., BMI), lipid dysregulation (TG, LDL, apolipoprotein A1), and diabetes-specific markers (HbA1c, HOMA-IR). Fibrosis showed weaker associations with metabolic factors, particularly in steatosis-free subgroups, with no significant metabolic links after multivariable adjustment.

Conclusion: Hepatic steatosis in T2DM predominantly reflects obesity-driven lipid dysregulation, whereas fibrosis exhibits mechanisms less directly tied to diabetes-specific metabolic factors. These findings underscore the need for distinct surveillance approaches for these hepatic complications in diabetes management*.*