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**PREVALENCE, COMORBID FACTORS AND CLINICAL CHARACTERIZATION OF MASLD AMONG PATIENTS WITH DIABETES MELLITUS ATTENDING ST. JOHN XXIII HOSPITAL ABER, NORTHERN RURAL UGANDA**

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**Introduction.** Metabolic dysfunction-associated steatotic liver disease (MASLD) is an increasing global burden, particularly in patients with type 2 diabetes mellitus (T2D). Data from sub-Saharan Africa remain scarce. This study assessed the prevalence of MASLD and associated risk factors among patients with T2D receiving care at a rural hospital in northern Uganda.

**Materials and Methods.** A cross-sectional study was conducted from August 2024 to April 2025 among 176 patients with diabetes. Sociodemographic, clinical, biochemical, and lifestyle data were collected, and hepatic steatosis was assessed by abdominal ultrasound. Univariate, multivariate, and principal component analyses were performed.

**Results.** The prevalence of steatotic liver disease was 25.9% among patients with type 2 diabetes, with the majority of cases being of pure metabolic origin (~75%). Female sex was associated with significantly lower odds of severe MASLD, whereas obesity, greater waist circumference, higher total cholesterol levels, and metformin use were associated with increased odds of severe disease.

**Conclusions.** In this rural-low-resource setting, the prevalence of MASLD among patients with T2D was lower than expected, but the pattern of associated risk factors closely resembled those observed in westernized populations. Metformin use acts as a marker of metabolic severity rather than a causal factor, in a context with limited antidiabetic options. Findings highlight the need of early prevention campaigns even in low-resource settings.