Adult Oral Presentation

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PREVALENCE, ASSOCIATED FACTORS AND ENDOTHELIAL DYSFUNCTION OF LATENT AUTOIMMUNE DIABETES IN YOUTH AMONG PATIENTS DIAGNOSED WITH TYPE 2 DIABETES MELLITUS

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Nur Asmak Abdullah, Rohana Abd Ghani, Chen Xin Wei
Endocrine Unit, Department of Internal Medicine, Faculty of Medicine, University Technology Mara, Sungai Buloh, Selangor, Malaysia

INTRODUCTION
Latent autoimmune diabetes in youth (LADY) is a slowly progressive form of autoimmune diabetes often misclassified as type 2 diabetes mellitus (T2DM). This study aimed to determine the prevalence of LADY among patients with young-onset T2DM, evaluate clinical characteristics, and assess endothelial dysfunction as a marker of vascular risk in a Malaysian cohort.

METHODOLOGY
A cross-sectional study was conducted at UiTM Sungai Buloh and Hospital Al-Sultan Abdullah, involving 125 patients aged 18-60 years diagnosed with T2DM before the age of 40. Participants were screened for anti-GAD antibodies to identify LADY cases. Clinical, biochemical, and anthropometric parameters were assessed, including c-peptide levels. Endothelial dysfunction was evaluated using flow-mediated dilation (FMD) and nitroglycerin-mediated dilation (NMD). Logistic regression was performed to identify factors associated with LADY and endothelial dysfunction.

RESULT
Of the 125 participants, 11 (8.8%) were diagnosed with LADY based on positive anti-GAD antibodies. Patients with LADY had a significantly longer diabetes duration (18 vs. 11 years, $p = 0.039$) and were predominantly female (82%). They exhibited lower c-peptide levels and required insulin more frequently (91% vs. 61% in T2DM). While LADY had lower median FMD (3.83% vs. 6.82% in T2DM), the difference was not statistically significant ($p = 0.147$). Logistic regression identified increasing age as significantly associated with endothelial dysfunction ($p = 0.016$), while LADY status showed a trend toward significance ($p = 0.071$).

CONCLUSION
Early identification and screening for LADY are essential to prevent delayed diagnosis, optimize metabolic management, and reduce the risk of endothelial dysfunction. Targeted interventions may optimize glycaemic control, mitigate vascular complications and improve long-term outcomes in this high-risk population.