PP-D-08

ENDOTHELIAL DYSFUNCTION IS ALREADY PRESENT IN THE PRE-IMPAIRED GLUCOSE TOLERANCE (PRE-IGT) STAGE WITH NO SIGNIFICANT IDENTIFIABLE CARDIOVASCULAR RISK FACTORS

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OBJECTIVES

Hyperinsulinemia, which is observed at the pre-impaired glucose tolerance (pre-IGT) stage, is the earliest dysmetabolic signal in the course of type 2 diabetes mellitus. The increased C-peptide during this period has been demonstrated to be the culprit for the development of cardiovascular disease. This study aims to determine the prevalence of endothelial dysfunction among individuals with pre-IGT and to determine the cardiovascular risk factors contributory to the development of endothelial dysfunction.

METHODOLOGY

We screened adult patients at risk for diabetes mellitus (first-degree relative with type 2 DM, obesity, history of gestational diabetes, and polycystic ovary syndrome). Pertinent demographic, clinical, and laboratory results were determined and recorded. To test for endothelial dysfunction, brachial artery flow-mediated dilatation (FMD) was performed on pre-IGT patients. Binary logistic regression was used to determine significant risk factors affecting endothelial dysfunction and to compare risk factors between FMD (+) and FMD (-) patients.

RESULTS

Of the 67 patients screened, 41 have pre-IGT with a prevalence of 61%. Among the pre-IGT who had FMD done (31/41), seven were FMD (+) with a prevalence of 22.58%. FMD (+) patients were more obese and had higher total cholesterol and LDL, however, the finding was not statistically significant. Other CVD risk factors were comparable between groups. In addition, none of the risk factors significantly predicted the development of endothelial dysfunction among patients with pre-IGT ($p>0.05$).

CONCLUSION

At the pre-IGT stage, endothelial dysfunction is already present in 22% of patients. No significant identifiable CVD risk factors have been found so far.

PP-D-09

SEX DIFFERENCES IN CARDIOMETABOLIC RISK FACTORS IN A TYPE 2 DIABETES POPULATION: AN INTERIM ANALYSIS OF THE TARGET-T2D STUDY IN MALAYSIA

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OBJECTIVES

This study aimed to examine differences in the control and treatment of cardiometabolic risk factors between males and females with type 2 diabetes (T2D) in Malaysia.

METHODOLOGY

The TARGET-T2D study, an ongoing cross-sectional study (December 2021–June 2022), involves T2D adults treated with lifestyle modification with and without oral/injectable glucose-lowering drugs for ≥12 months in outpatient settings. We included 8 tertiary public hospitals in the Greater Kuala Lumpur region. In this interim analysis (13 December 2021–31 March 2022), we compared the attainment rates of ABC targets (HbA1c<7%, Blood pressure [BP]<130/80 mm Hg, LDL-Cholesterol <1.8 mmol/L) and use of cardiorenal-protective drugs (sodium-glucose co-transporter-2 inhibitors [SGLT2i], glucagon-like peptide-1 receptor analogues, renin-angiotensin system inhibitors [RASi], statins) by sex.