

CONCLUSION

HbA1c cut off of 6.5% demonstrated better diagnostic performance and clinical utility compared to 6.3%. Larger studies are needed to identify the optimal HbA1c diagnostic criteria for multiethnic Malaysia.

PP-05

The Relationship between Nutritional Status, Glucose and Lipid Levels in Pulmonary Tuberculosis and Multi-Drug-Resistant Tuberculosis in Patients with Diabetes Mellitus

<https://doi.org/10.15605/jafes.034.S17>

Muhammad Aron P, Santi S, Dharma L

Division of Endocrinology, Metabolic and Diabetes, Department of Internal Medicine, Medical Faculty of Universitas Sumatera Utara, Medan, Indonesia

INTRODUCTION

Diabetes mellitus (DM) poses a significant risk for development of active tuberculosis (TB) and a higher risk of developing multi-drug-resistant tuberculosis (MDR-TB). The purpose of this study was to analyze the correlation between nutritional status, glucose and lipid levels in pulmonary tuberculosis and multi-drug-resistant tuberculosis in persons with diabetes.

METHODOLOGY

The study was designed as a cross-sectional study of 69 patients with DM at Haji Adam Malik Hospital, divided into group 1 (n=37) for patients with TB and group 2 (n=32) for patients with MDR-TB, from the internal medicine ward from January to December 2018. Data included the patients' demographic characteristics, history of illness, and clinical examination (BMI). Laboratory tests for evaluation of glucose (FPG, PPS, HbA1C), albumin, lipids (Total Cholesterol, TG, LDL-C and HDL-C). Spearman and Pearson correlation tests were used to correlate numerical variables.

RESULTS

The average age for group 1 was 56,16±8,55 years old, and 52,41±8,38 years old for group 2. Diabetes duration, BMI, albumin, HbA1C and HDL-C were significantly different between group 1 and group 2 (p<0,005). In group 2, the duration of diabetes, HbA1C, BMI and albumin were significantly higher compared to group 1. A significant correlation was found between HbA1C and BMI (r=-0.357, p=0.030), HbA1c with albumin (p=0.037, r=-0.315) but no correlation with lipids (p>0.05).

CONCLUSION

In diabetes mellitus with TB and MDR-TB, HbA1C correlated significantly with BMI and albumin.

PP-06

Association Between Neck Circumference and Dyslipidemia in Obesity Patients

<https://doi.org/10.15605/jafes.034.S18>

Aimi Fadilah M, Che Zarina I, Nur Aisyah Z, Nur Aini EW, Fatimah Zaherah MS, Rohana AG

Fakulti Perubatan, Universiti Teknologi MARA (UiTM), Sungai Buloh, Malaysia

INTRODUCTION

Obesity remains a major health issue in Malaysia with increasing prevalence each year. Obesity is associated with metabolic syndrome and increased mortality due to cardiovascular disease. Metabolic syndrome is a group of conditions which includes central obesity; plus 2 metabolic parameters such as raised blood pressure, raised fasting plasma glucose, raised triglyceride (TG) level and reduced high density lipoprotein (HDL) levels. Neck circumference is a measure of visceral adiposity and is associated with obesity and metabolic syndrome.

METHODOLOGY

We performed a retrospective analysis of patients who were attending the University Teknologi MARA (UiTM) Weight Management Clinic. We studied the patient records and assessed association between neck circumference and dyslipidemia. We performed Pearson's Correlation to determine relationship between TG and HDL levels and various parameters such as weight, BMI, waist circumference and neck circumference.

RESULTS

A total of 92 patients attended the clinic with a median BMI of 43.2±9.6 kg/m². Median weight was 118±26 kg. There was a negative correlation between waist circumference and HDL level (r=-0.251; p=0.02). This negative correlation is also seen with neck circumference and HDL (r=-0.469; p 0.00). Neck circumference also has a positive correlation with TG levels (r=0.422; p=0.00) but no statistically significant correlation between waist circumference and TG. There was also no statistically significant correlation between both weight and BMI with TG and HDL levels.

CONCLUSION

Neck circumference is associated with high TG levels and low HDL which is consistent with metabolic syndrome. Waist circumference and neck circumference is a more direct measure of obesity and seems to be a better predictor of development of metabolic syndrome, especially dyslipidemia compared to weight and BMI.