

PP7 Comparison of fasting and OGTT plasma glucose in the diagnosis of diabetes and pre-diabetes in Sri Lankan adults

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Introduction

Fasting plasma glucose (FPG) and plasma glucose after an oral load of glucose (glucose tolerance test) are commonly used to diagnose diabetes and pre-diabetic categories like impaired fasting glucose (IFG) and impaired glucose tolerance (IGT).

Objectives

To compare the performance of FPG against 2-hr-plasma glucose (2-hr PG) in the diagnosis of diabetes and pre-diabetes among Sri Lankans.

Methods

Using a multi-stage random cluster sampling technique, we recruited a non-institutionalized adult sample above 18 years from all provinces except the North and the East. In the total sample of 4532, 4013 were not known to have diabetes previously. They were classified as diabetes (FPG ≥ 7.0 mmol/L or 2-hr-PG ≥ 11.1 mmol/L), impaired fasting glucose (FPG 5.5-6.9mmol/L), impaired glucose tolerance (2-hr-PG 7.8 – 11.0mmol/L) and no diabetes using FPG and 2-hr PG data. Data were analyzed using SPSS 17.0 comparing the validity of FPG against OGTT (oral glucose tolerance test).

Results

The mean 2-hr-PG was higher in women (6.40mmol/l) than men (5.74mmol/l) ($p > 0.05$), but the FPG was not significantly different between men (4.88mmol/l) and women (4.83mmol/l) ($p > 0.05$). In both sexes, higher levels of FPG and 2-hr-PG were significant with increasing age. Men had significantly higher FPG in 20-29 and 30-39 age groups. Highest 2-hr-PG was seen in > 70 age group in both sexes. When compared with 2-hr-PG, the sensitivity and specificity of FPG at a cut-off of 5.5mmol/L to diagnose either pre-diabetes or diabetes was 44% and 94%; to diagnose diabetes alone was 81% and

91%. When a cut-off of 5.25mmol/L was used, the sensitivity and specificity to diagnose either diabetes or pre-diabetes was 55% and 87%; to diagnose diabetes only was 88% and 84%.

Conclusion

FPG has low sensitivity and specificity for the diagnosis of diabetes compared to 2-hr plasma glucose in OGTT. The sensitivity may be increased by lowering the cut-off values.

PP8 Management outcome of cardiomyopathy in pregnancy- A Sri Lankan experience

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Introduction

Cardiomyopathy in pregnancy is rare (1:15,000) and can be extremely hazardous (50% mortality) with adverse feto-maternal outcomes. Rarity of cases results in lack of common consensus regarding their management. Descriptively analysing these women will enable us to understand this condition more clearly.

Objective

To assess the management-outcomes of cardiomyopathy in pregnancy

Method

A retrospective study of consecutive pregnant women with cardiomyopathy including peripartum cardiomyopathy (PCM) managed at a tertiary care unit from 2006-2010.

Results

There were 14 cases with a Median age 30 (IQR=7.25). 50% were more than 30 years and 21.4% were more than 35 years. Median gestations were 2 (IQR=2), with two primigravidae. PCM occurred in 7 (50%); others -dilated in 4 and hypertrophic in 3. Five