

RESULTS AND CONCLUSION

Twenty-five patients fulfilled SMBG record with a total of 458 readings by glucose meters. Mean of blood glucose levels during fasting is 164.34 ± 72.661 mg/dL, with minimum 72 mg/dL and maximum 443 mg/dL. After *iftar* evidently has the highest mean blood glucose level (214,1 mg/dL) between other times. There are only two patients who reported symptomatic hypoglycaemia, but no one categorized as biochemical hypoglycaemia that should be recommended to break the fast at the day. The rate of hyperglycaemia is 7.6% of SMBG readings among all the results.

KEY WORDS

glycemic control, type 2 diabetes, ramadan fasting, self-monitoring of blood glucose

OA-D-34

POLYMORPHISM IN MTNR1B VARIANT GENE IS PROTECTIVE AGAINST GESTATIONAL DIABETES MELLITUS AMONG FILIPINO PREGNANT WOMEN

<https://doi.org/10.15605/jafes.034.02.S52>

Maria Ruth Pineda-Cortel,^{1,2,3} Romar Dabban,¹ Regine Due,¹ Madelle Lopez,¹ Gary Mamaid,¹ Renielle Mangahas,¹ Joseph Rafael Mauleon,² Nariwah Gaus,³ **Shamar Lo Lasta**^{2,4}

¹Department of Medical Technology, University of Santo Tomas, Manila, Philippines

²The Graduate School, University of Santo Tomas, Manila, Philippines

³Research Center for the Natural and Applied Sciences, University of Santo Tomas, Manila, Philippines

⁴Institute of Clinical Laboratory Sciences, Silliman University, Dumaguete City, Philippines

INTRODUCTION

This study aimed to determine the association of rs10830963 polymorphism on the MTNR1B gene with insulin resistance (IR), insulin sensitivity (IS), and the risk of developing gestational diabetes mellitus (GDM) among Filipino pregnant women.

METHODOLOGY

A cross-sectional study was conducted involving 232 Filipino pregnant women, 72 GDM cases and 160 non-GDM women. DNA samples were extracted using a commercially available kit with slight modifications. Rs10830963 was genotyped using *taqman* allelic discrimination assay. Mann-Whitney U-test was used to determine the significant difference of various phenotypic characteristics between pregnant women with and without GDM. Person's chi-square was used to determine the association of the said polymorphism with GDM. Lastly, odds ratio computation was used to determine the likelihood of developing GDM depending on the pregnant women's genotypic and allelic characteristics.

CONCLUSION

The occurrence of rs10830963 polymorphism in MTNR1B gene is protective against the development of GDM among Filipino pregnant women but is not associated with insulin resistance nor insulin sensitivity

KEY WORDS

gestational diabetes mellitus, gene polymorphism, MTNR1B gene