Author's response to reviews

Title: Insulin resistance as estimated by the homeostatic method at diagnosis of gestational diabetes: estimation of disease severity and therapeutic needs in a population-based study.

Authors:

- Alina Sokup (alinasokup@o2.pl)
- Barbara Ruszkowska (ruszkowska.basia@gmail.com)
- Krzysztof Góralscyk (krzyg@cm.umk.pl)
- Małgorzata Walentowicz (walentowiczm@cm.umk.pl)
- Marek Szymański (szymar@hoga.pl)
- Danuta Rość (drost@cm.umk.pl)

Version: 2  Date: 30 January 2013

Author's response to reviews: see over
Bydgoszcz, January 30th, 2013

Alina Sokup M.D, PhD
St. Ujejskiego 75, 86-141 Bydgoszcz, Poland
phone: 0048 509 217 662
fax: +48 52 371 49 12
e-mail: alinasokup@o2.pl

Editor of the BMC Endocrine Disorders Journal

We are submitting the revised version of manuscript entitled: “Insulin resistance as estimated by the homeostatic method at diagnosis of gestational diabetes: estimation of disease severity and therapeutic needs in a population-based study.

I am very grateful for a valuable comments and suggestions from all Reviewers. I have took into account most of them.

Sincerely Yours
Alina Sokup MD, PHD
Nicolaus Copernicus University , Bydgoszcz, Poland

Answers for the comments- Reviewer Renata Saucedo:

Accordingly to the Polish Diabetes Society the first evaluation of the pregnant women to screen GDM is make by the gynecologist at the first prenatal visit. If the fasting venous plasma glucose is $\geq 5.55$ mmol/l (threshold$\geq 100$ mg/dl) the 50-g GCT test is performed as soon as possible. Thus, in population studied were also women with diagnosis of GDM earlier than 24-28 week. I placed these information in the revision version of manuscript. 184 of women had a prior history of GDM. The ANOVA test was analyzed with post–hoc test to locate the differences between subgroups. In this study we assessed prepregnancy BMI as a more important in my opinion index than the BMI assessed during pregnancy.
Answers for the comments-reviere Sesiah V.  

Thank You very much for Your valuable comments. Almost all of them I have took into account in the revision of this manuscript. All women we subdivided by quartiles of HOMA-IR to evaluate, characterize and compare basal anthropometric, metabolic parameters and therapy accordingly to the insulin resistance degree. This method is used in different studies. Interestingly, the A1c was higher in the fourth quartile than the first and second quartile. I think that this result are possibly due to the association between A1c and insulin resistance, between A1c and gestational diabetes (1), and between A1c and cardiometabolic risk markers (2).


Answers for the comments-Reviewer Yvonne Winhofer

Thank you very much for Your suggestions. I have took into account all of them in the revision of this manuscript. Accordingly to the Polish Diabetes Society the $5.55 \text{mmol/l} \geq 100 \text{mg/dl}$ threshold) is a cut-off value for fasting glucose during OGTT.

In the population studied only 72 women had a HOMA-IR>5. The mean fasting glucose was $5.52 \pm 0.80$, BMI $27.89 \pm 6.30$, insulin $219.48 \pm 106.86$, week at the diagnosis of GDM $27.27 \pm 5.16$. This subgroup characterized higher :BMI, insulin, HbA1C and HOMA-B $-662.91 \pm 714.11$ compared with other women.