



Letter to the editor on: “Second-trimester and third-trimester maternal lipid profiles significantly correlated to LGA and macrosomia”

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Dear Editor,

We read with great interest the article by Xi et al. entitled “Second-trimester and third-trimester maternal lipid profiles significantly correlated to LGA and macrosomia” [1]. The retrospective study concluded that high TG levels during the second or third trimester could be both considered as indicators of a high risk of large for gestational age (LGA) and macrosomia, and suggested that future lifestyle programs on lowering TG levels may help to reduce the incidence of LGA and macrosomia. However, the authors did not consider high TG effects during the first trimester, which might have partly contributed these increased risks of LGA and macrosomia. We would like to address some points that merit more attention.

Elevated triglyceride (TG) levels during early or late pregnancy have been reported both associated with increased risks of adverse pregnancy outcomes. For years, clinical interventions during gestation to reduce adverse pregnancy have been reported not very ideal, as was reported [2], the lifestyle intervention in pregnancy had no measurable effect on obstetrical or neonatal outcomes, despite a modest but significant decrease in gestational weight gain (GWG).

In our recent published research, we found that high TG levels during early pregnancy was associated with increased risks of preterm delivery, preeclampsia, GDM and LGA. However, compared with high TG levels during early pregnancy alone, persistently high TG levels during both early and late pregnancy only slightly increased about 30% risks of LGA without increasing risks of preeclampsia and GDM,

which indicated that elevated TG levels during early not late pregnancy could be the crucial factor associated with adverse pregnancy outcomes [3]. Women with pre-pregnancy overweight (OW) and obesity (OB) presented higher means of TG levels during gestation, compared to normal weight (NW) women [4]. We think OW and OB women with prepregnancy lifestyle interventions to prevent the appearance of high TG levels during early pregnancy may benefit more in reducing the risks of adverse pregnancy outcomes, rather than only focus on interventions during gestation.

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Declarations

Conflict of interest The authors report no conflicts of interest.

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