

Early glucose tolerance tests with recently modified ADIPS criteria:

Is it doing more harm than good for women with gestational diabetes?

Dr Amanda Quattrocelli and Dr Arzoo Khalid

Department of Obstetrics and Gynaecology, Northern Health



Background

Gestational diabetes (GDM) is glucose intolerance first diagnosed in pregnancy. The incidence of GDM is approximately 17%, with women undergoing glucose tolerance testing (GTT) at 26-28 weeks in a normal pregnancy. An early GTT can be taken prior to 24 weeks gestation if there are risk factors for GDM¹.

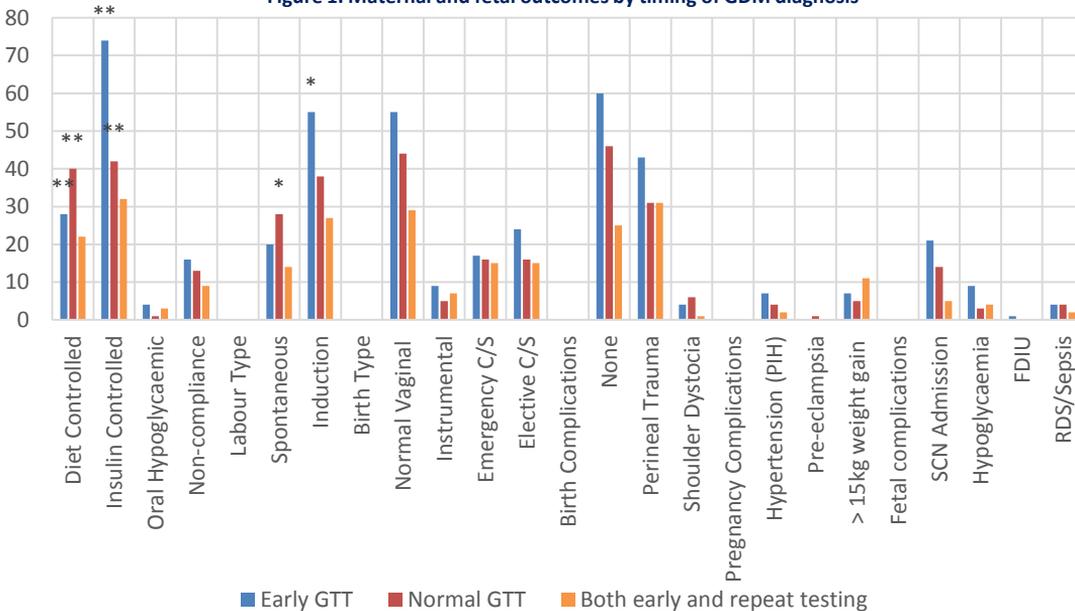
Aim

To determine if there is a difference in maternal and fetal outcomes between women with GDM who are diagnosed with GDM on an early GTT compared to diagnosis after 24 weeks gestation

Method

- Retrospective analysis of 243 women with GDM out of 1298 births at Northern Health between
- 1/7/17 – 31/10/17
- GTT < 24 weeks (n=104) vs > 24 weeks (n=82) vs both tests (n=57)
- Maternal and fetal outcomes recorded from BOS and hospital records (see Figure 1)
- Chi squared analysis for difference in outcomes

Figure 1. Maternal and fetal outcomes by timing of GDM diagnosis



Results

- Increased incidence of GDM with ADIPS diagnostic criteria¹ (17% increased to 18.7%)
- Women diagnosed on early GTT were more likely to be insulin dependent compared to those diagnosed at normal GTT (p<0.01)
- Women diagnosed at normal GTT were more likely to be diet controlled (p < 0.01) and have a spontaneous onset of labour (p<0.05)
- No difference between groups for any other maternal or fetal outcome in the Northern Health population

Conclusion

The modified ADIPS criteria for GDM diagnosis has lead to increased GDM diagnosis in this patient population. Women who were diagnosed early had very little difference in outcomes compared to those diagnosed with GDM after 24 weeks gestation.

¹ Nankervis A, McIntyre HD, Moses R, Ross GP, Callaway L, Porter C, et al. ADIPS Consensus Guidelines for the Testing and Diagnosis of Hyperglycaemia in Pregnancy in Australia and New Zealand. http://adips.org/downloads/2014_ADIPSGDMGuidelinesV18.11.2014_000.pdf. Modified November, 2014.