

## HAVE THE NEW ADIPS GDM CRITERIA RESULTED IN A CHANGE IN THE CLINIC POPULATION AND/OR MATERNAL AND NEONATAL OUTCOMES?

J.R. Flack<sup>1,2,3</sup>, T. Wong<sup>1,2</sup>, R.A. Barnes<sup>1,4</sup>, G.P. Ross<sup>1,5</sup>

<sup>1</sup> Diabetes Centre, Bankstown-Lidcombe Hospital, Bankstown NSW

<sup>2</sup> Faculty of Medicine, University of NSW, Sydney NSW

<sup>3</sup> School of Medicine, Western Sydney University, Sydney NSW

<sup>4</sup> Faculty of Health and Medicine, University of Newcastle, Callaghan NSW

<sup>5</sup> Faculty of Medicine, University of Sydney, Camperdown NSW

**Background:** Based on HAPO Study findings, the IADPSG proposed new Gestational Diabetes Mellitus (GDM) diagnostic criteria associated with a 1.75 increased risk of a Large for Gestational Age (LGA) infant. Endorsed in 2013 by WHO, worldwide adoption has been variable. Our Department implemented these Australasian Diabetes in Pregnancy Society (ADIPS) recommended criteria from 1-Mar-2016.

**Aim:** To compare characteristics and outcomes in GDM women diagnosed by new criteria (Group1) with those diagnosed by previous ADIPS 1998 Australian criteria (Group2).

**Methods:** From our database of prospectively collected data from an ethnically-diverse high-risk universally tested GDM cohort, we compared 12 months data for Group1 women [diagnosed 1-Mar-16 to 28-Feb-2017] with Group2 [diagnosed 1-Mar-15 to 29-Feb-2016]. Management involved two formal diet/GDM education sessions and weekly to fortnightly multidisciplinary clinic visits including an endocrinologist. Women self-monitored finger-prick glucose, fasting and post-prandially. Insulin was prescribed if treatment targets were not met: (Group1) FBGL<5.3mmol/L, 2hr post-prandial BGL<7.0mmol/L; (Group2) <5.5mmol/L and <7.0mmol/L respectively. Metformin was not used. Outcomes reported are for consecutive live singleton births.

**Results:** There were 455 women (Group1) and 402 (Group2). Comparing Group1 versus Group2: there were significant differences by major ethnic background group: European Middle Eastern 21.3%vs19.4%; 28.4%vs26.1%; SE Asian 20.9%vs32.8%; South Asian 20.7%vs15.9%; Other 8.8%vs5.7%. There were no other significant differences in baseline characteristics, including similar rates of overweight and obesity despite the significant change in distribution of ethnicities. Regarding outcomes, there were non-significant lower rates of insulin use, caesarean delivery and LGA, and higher early delivery rates in Group1. There were more Small for Gestational Age (SGA) infants in Group1 compared to Group2 [9.2vs4.7% (p<0.05)]. This remained significant following adjustment for ethnicity.

**Conclusions:** Following adoption of new ADIPS 2014 GDM diagnostic criteria, there was a significant reduction in SE Asian background diagnoses, but more SGA.