

IMPLEMENTATION OF WHO GESTATIONAL DIABETES MELLITUS DIAGNOSTIC CRITERIA - HAS IT CHANGED THE CLINIC POPULATION?

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Background: Based on HAPO Study findings, the IADPSG proposed new Gestational Diabetes Mellitus (GDM) diagnostic criteria associated with a 1.75 increased risk of adverse outcomes. Endorsed in 2013 by WHO, worldwide adoption has been variable. Our Department implemented these criteria from 1-Mar-2016.

Aim: To compare characteristics and outcomes in GDM women diagnosed by new criteria (Group1) with those diagnosed by previous Australasian Diabetes in Pregnancy Society (ADIPS1988) criteria (Group2).

Methods: From our database of prospectively collected data from an ethnically-diverse high-risk GDM cohort, we compared Group1 women diagnosed 1-Mar-16 to 31-Dec-2016 with Group2 1-Mar-15 to 31-Dec-2015. Group1 outcomes are based on those who have delivered [n=283] (excluding those recently referred or early in management). Management involves two formal diet/GDM education sessions and weekly to fortnightly multidisciplinary clinic visits including Endocrinologist. Women self-monitored finger-prick glucose, fasting and post-prandially. Insulin was prescribed if criteria 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.

Results: There were 411 women (Group1) and 337 (Group2). Comparing Group1vsGroup2: there was earlier diagnosis (mean±SD) 23.3±5.9 vs 24.1±5.2 weeks (p<0.05) and significant differences by major ethnic background group: European 29.0%vs23.7%; Middle Eastern 20.9%vs21.1%; SE Asian 20.2%vs33.5%; South Asian 21.4%vs16.6%. Insulin prescription was 30.7% (Group1) vs 38.9% (Group2). SGA and LGA rates respectively were: (Group1) 9.9% and 12.4% vs (Group2) 4.9% and 12.2%.

Conclusions: Following adoption of new WHO GDM diagnostic criteria, there was a 22% increased workload, significant reduction in SE Asian background diagnoses, less insulin use and similar LGA.

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