

## **P187. Change in prevalence of Gestational Diabetes and obstetric complications when applying IADPSG screening criteria in a Belgian French population**

*E Costa (BE) [1], C Gerday (BE) [2], M Joubran (BE) , G Pamela (BE) , V Laetitia (BE) [3], C Kirkpatrick (BE) [4], D Caroline (BE) [5], P Axelle (BE) [6]*

**Context:**In April 2012 our institution chose to switch from the Carpenter and Coustan (CC) criteria for Gestational Diabetes Mellitus (GDM) screening, to the International Association of Diabetes in Pregnancy Study Group (IADSPG) criteria. This shift led to an increased prevalence of GDM in our pregnant population.

**Objectives:**The primary objective is to estimate the magnitude of the increase in GDM prevalence before and after the switch in screening strategy. Our secondary objective is to evaluate if there was a significant difference in the two periods in the percentage of Macrosomia, Gestational Hypertensive Disorders (GHD) and primary Cesarean Section (pCS)

**Participants :**We selected retrospectively a cohort of 6577 patients that delivered at our institution. 4762 delivered between June 26th 2009 and December 31st 2011, and were screened with CC criteria. 1815 delivered between January 1st 2013 and January 31st 2014 and were screened with IADPSG criteria.

**Methods:**We checked patients' electronic file to establish GDM status, baseline characteristics, obstetrical complications (GHD and pCS) and Macrosomia in the offspring. We computed 95% confidence intervals with the exact method. We compared variables with chi squared test in categorical variables and Wilcoxon Mann in continuous variables. We computed crude OR for GDM according to the two screening strategies , and then adjusted it for baseline characteristics that differed significantly in the two periods . Alpha was set at 0.05.

**Main outcome measurements:** Prevalence of GDM according to CC screening strategy was 6.05% (95%CI 5.4-6.7). the prevalence of GDM according to IADPSG screening strategy was 13.72% (95%CI 12.2-15.4).

**Results :**The unadjusted OR of having GDM according to IADPSG criteria compared to CC criteria is 2.47 (2.06-2.95), once adjusted for significantly different baseline characteristics that we found in the sample population of the two periods, the aOR was 2.16 (95%CI 1.65-2.83).

There was no statistically significant difference in the occurrence of pCS, GHD or Macrosomia between the two periods.

**Conclusions:** Compared with the CC criteria, GDM screened with IADPSG criteria in our population has more than doubled its prevalence, treating these extra GDM does not seem to have a significant impact on Macrosomia, GDH and pCS . A prospective study is under way to assess if GDM screening by IADPSG criteria is the best fit for the Belgian population.

[1] Hôpital Erasme, Anderlecht, [2] ULB Bruxelles, [3] Hôpital Tivoli, La Louviere, [4] ULB , Bruelles, [5] Hôpital Erasme, Bruxelles, [6] Hôpital Erasme, Bruxelles