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Corrigendum to “Performance of early pregnancy HbA1c for predicting gestational diabetes mellitus and adverse pregnancy outcomes in obese European women” [Diab. Res. Clin. Pract. 168 (2020) 108378](S0168822720306318)(10.1016/j.diabres.2020.108378)

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Corrigendum

Corrigendum to “Performance of early pregnancy HbA_{1c} for predicting gestational diabetes mellitus and adverse pregnancy outcomes in obese European women” [Diab. Res. Clin. Pract. 168 (2020) 108378]



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The authors regret that a few lines in Tables 1 and 2 were formatted incorrectly in the published version of the article with numbers all appearing in one line instead of being in separate lines. The correctly formatted tables are shown below.

The authors would like to apologise for any inconvenience caused.

Table 1 – Comparison of baseline characteristics between HbA_{1c} categories.

| Characteristics | $\geq 5.7\%$ (39 mmol/mol), n = 111 | | $<5.7\%$ (39 mmol/mol), n = 758 | | p value |
|---|-------------------------------------|----------------|---------------------------------|----------------|---------|
| | n | Mean ± SD or % | n | Mean ± SD or % | |
| Maternal characteristics | | | | | |
| Age (years) | 111 | 33.13 ± 5.2 | 758 | 31.85 ± 5.3 | 0.02 |
| Pre-pregnancy BMI (kg/m ²) | 110 | 34.69 ± 4.9 | 752 | 33.75 ± 4.4 | 0.04 |
| Booking BMI (kg/m ²) | 111 | 35.51 ± 5.0 | 754 | 34.39 ± 4.3 | 0.03 |
| European descent | 93/109 | 85.3 | 660/757 | 87.2 | 0.55 |
| Multiparity | 63/109 | 57.8 | 367/757 | 48.5 | 0.08 |
| Previous GDM | 8/73 | 11.0 | 40/458 | 8.7 | 0.51 |
| Previous macrosomia | 21/73 | 28.8 | 93/457 | 20.4 | 0.12 |
| History of chronic hypertension | 15/109 | 13.8 | 97/49 | 13.0 | 0.76 |
| Previous stillbirth | 2/73 | 2.7 | 54/458 | 11.8 | 0.01 |
| History of congenital malformation | 2/73 | 2.7 | 17/459 | 3.7 | 1.00 |
| Smoking in early pregnancy | 13/109 | 11.9 | 126/754 | 16.7 | 0.26 |
| Alcohol consumption during pregnancy | 4/107 | 3.7 | 47/750 | 6.3 | 0.39 |
| Higher education | 60/109 | 55.0 | 423/756 | 56.0 | 0.92 |
| First-degree family history of diabetes | 36 | 32.4 | 166 | 21.9 | 0.02 |
| History of PCOS | 12/109 | 11.0 | 76/746 | 10.2 | 0.74 |
| SBP in early pregnancy (mm Hg) | 110 | 116.6 ± 10.0 | 754 | 116.7 ± 10.7 | 0.88 |
| DBP in early pregnancy (mm Hg) | 110 | 73.7 ± 7.9 | 754 | 73.1 ± 8.4 | 0.47 |
| HDL cholesterol (mmol/L) | 107 | 1.4 ± 0.3 | 715 | 1.4 ± 0.3 | 0.06 |
| LDL Cholesterol (mmol/L) | 107 | 3.1 ± 0.7 | 716 | 3.1 ± 0.8 | 0.52 |
| Triglycerides (mmol/L) | 107 | 1.4 ± 0.5 | 716 | 1.4 ± 0.5 | 0.51 |
| Glycemic characteristics | | | | | |
| <i>OGTT in early pregnancy (<20 weeks)</i> | | | | | |
| Gestation (weeks) | 111 | 14.8 ± 2.5 | 758 | 15.1 ± 2.4 | 0.32 |
| Fasting glucose (mmol/L) | 111 | 4.8 ± 0.5 | 757 | 4.7 ± 0.5 | 0.002 |
| 1-hr glucose (mmol/L) | 108 | 7.5 ± 1.9 | 711 | 7.1 ± 1.7 | 0.01 |
| 2-hr glucose (mmol/L) | 107 | 6.3 ± 1.5 | 712 | 6.0 ± 1.3 | 0.09 |
| <i>OGTT in First trimester</i> | | | | | |
| Gestation (weeks) | 21 | 11.3 ± 1.5 | 135 | 11.6 ± 1.4 | 0.44 |
| Fasting glucose (mmol/L) | 21 | 4.9 ± 0.4 | 135 | 4.8 ± 0.5 | 0.30 |
| 1-hr glucose (mmol/L) | 20 | 7.5 ± 1.6 | 130 | 7.2 ± 1.8 | 0.54 |
| 2-hr glucose (mmol/L) | 20 | 6.0 ± 1.2 | 130 | 6.3 ± 1.3 | 0.35 |
| <i>OGTT at 13–20 weeks</i> | | | | | |
| Gestation (weeks) | 90 | 15.6 ± 1.9 | 623 | 15.8 ± 1.8 | 0.37 |
| Fasting glucose (mmol/L) | 90 | 4.8 ± 0.5 | 622 | 4.7 ± 0.5 | 0.004 |
| 1-hr glucose (mmol/L) | 88 | 7.6 ± 2.0 | 581 | 7.1 ± 1.7 | 0.01 |
| 2-hr glucose (mmol/L) | 87 | 6.3 ± 1.5 | 582 | 6.0 ± 1.3 | 0.02 |

Table 1 – Continued.

| Characteristics | $\geq 5.7\% \text{ (39 mmol/mol), n} = 111$ | | $<5.7\% \text{ (39 mmol/mol), n} = 758$ | | <i>p</i> value |
|---|---|--------------------|---|--------------------|----------------|
| | n | Mean \pm SD or % | n | Mean \pm SD or % | |
| OGTT at 24–28 weeks | | | | | |
| Gestation (weeks) | 57 | 26.3 \pm 1.3 | 466 | 26.5 \pm 1.5 | 0.40 |
| Fasting glucose (mmol/L) | 57 | 4.5 \pm 0.4 | 459 | 4.5 \pm 0.4 | 0.95 |
| 1-hr glucose (mmol/L) | 55 | 7.9 \pm 1.4 | 452 | 7.6 \pm 1.6 | 0.13 |
| 2-hr glucose (mmol/L) | 56 | 6.2 \pm 1.4 | 447 | 6.2 \pm 1.2 | 0.84 |
| OGTT at 35–37 weeks | | | | | |
| Gestation (weeks) | 46 | 35.8 \pm 0.8 | 360 | 35.8 \pm 0.9 | 0.75 |
| Fasting glucose (mmol/L) | 46 | 4.5 \pm 0.6 | 360 | 4.4 \pm 0.4 | 0.69 |
| 1-hr glucose (mmol/L) | 41 | 8.3 \pm 1.5 | 347 | 7.9 \pm 1.4 | 0.08 |
| 2-hr glucose (mmol/L) | 41 | 6.5 \pm 1.3 | 345 | 6.5 \pm 1.2 | 0.79 |
| GDM prevalence | | | | | |
| Overall | 57 | 51.4 | 302 | 39.8 | 0.02 |
| <20 weeks | 41 | 36.9 | 184 | 24.3 | 0.007 |
| 24–28 weeks | 6/57 | 10.5 | 69/467 | 14.8 | 0.55 |
| 35–37 weeks | 10/46 | 21.7 | 49/361 | 13.6 | 0.18 |
| Fasting 110–125 mg/dl (6.1–6.9 mmol/L) | | | | | |
| First trimester | 0/21 | 0.0 | 3/135 | 2.2 | 1.00 |
| 13–20 weeks | 2/90 | 2.2 | 5/622 | 0.8 | 0.22 |
| Gestational characteristics | | | | | |
| Gestation at delivery (weeks) | 83 | 40.1 \pm 8.0 | 590 | 39.5 \pm 3.0 | 0.14 |
| Birth weight (gram) | 88 | 3512.0 \pm 542.4 | 628 | 3485.5 \pm 518.9 | 0.66 |

The table shows comparison of maternal, glycaemic, and gestational characteristics between women with higher and lower HbA_{1c} levels. Because there has been considerable interest in the first trimester hyperglycemia, the early OGTT values were further divided into two stages; 0–12 weeks and 13–20 weeks. BMI = Body mass index; GDM = Gestational diabetes mellitus; PCOS = Polycystic ovarian syndrome; SBP = Systolic blood pressure; DBP = Diastolic blood pressure; HDL = High-density lipoprotein; LDL = Low-density lipoprotein; OGTT = Oral glucose tolerance test.

Table 2 – Test characteristics of HbA_{1c} at a threshold of ≥5.7% (39 mmol/mol) for detecting GDM.

| GDM criteria | Gestation | GDM Prevalence (%) | Sensitivity (%) | Specificity (%) | PPV (%) | NPV (%) | AUC (CI), p value* |
|--|----------------------|---|-----------------|-----------------|---------|---------|------------------------|
| IADPSG | Throughout gestation | 41.3 (359/869) | 15.9 | 89.4 | 51.4 | 60.2 | 0.55 (0.51–0.59), 0.01 |
| | Before 20 weeks | 25.9 (225/869) | 18.2 | 89.1 | 36.9 | 75.7 | 0.55 (0.50–0.59), 0.04 |
| | First trimester | 32.1 (50/156) | 14.0 | 86.8 | 33.3 | 68.1 | |
| | 13–20 weeks | 24.5 (175/713) | 19.4 | 89.6 | 37.8 | 77.4 | |
| | 24–28 weeks | 14.3 (75/524) [†] (8.6 of total n) | 8.0 | 88.6 | 10.5 | 85.2 | 0.54 (0.47–0.61), 0.27 |
| | 35–37 weeks | 14.5 (59/407) [‡] (6.8 of total n) | 16.9 | 89.7 | 21.7 | 86.4 | 0.57 (0.49–0.65), 0.09 |
| Fasting 6.1–6.9 mmol/l (110–125 mg/dl) | First trimester | 1.9 (3/156) | 0.0 | 86.3 | 0.0 | 97.8 | 0.70 (0.53–0.86), 0.24 |
| | 13–20 weeks | 1.0 (7/712) | 28.6 | 87.5 | 2.2 | 99.2 | 0.69 (0.54–0.83), 0.09 |

The table shows the test characteristics of early pregnancy HbA_{1c} for detecting GDM at a threshold of ≥5.7% (39 mmol/mol).

* The area under the receiver operating characteristic curve shows the performance of early pregnancy HbA_{1c} for detecting GDM using all possible HbA_{1c} thresholds.

[†] After excluding early GDM.

[‡] After excluding early and 24–28-week GDM; GDM = Gestational diabetes mellitus; PPV = Positive predictive value; NPV = Negative predictive value; AUC = Area under the curve; CI = Confidence interval, IADPSG = International Association of Diabetes and Pregnancy Study Groups.