**Insulin Resistance and Obesity and their Association with Depression in Relatively Young People: Findings from a Large U.K. Birth Cohort**

Perry, B.I.; Khandaker, G.M.; Marwaha, S.; Thompson, A.; Zammit, S.; Singh, S.P.; Upthegrove, R.

**Supplementary Data**

 Supplementary Data Table 1: Complete cases: Cross-sectional association between dysglycaemia/BMI and depressive symptoms (age 18)

|  |  |
| --- | --- |
| **Predictor** | **Regression Co-efficient (95% C.I.) for Depressive Symptoms** |
|  | **Adjustments**  |
| **Unadjusted Model** | **Demographic adjustments**(sex, birth social class, ethnicity, maternal education, maternal EPDS score) | **Lifestyle adjustments**(BMI1, HOMA22, smoking, alcohol use physical activity) | **Immune adjustments**(IL-6 (9y), CRP (18y)) | **Complete model**(all adjustments) |
| **Depressive Symptoms** |
|  | **n** | **B (95% C.I.)** | **p** | **B (95% C.I.)** | **p** | **B (95% C.I.)** | **p** | **B (95% C.I.)** | **p** | **B (95% C.I.)** | **p** |
| HOMA2 | 2231 | 0.04 (0.01-0.19) | 0.042\* | 0.03 (-0.24-0.11) | 0.484 | 0.06 (-0.09-0.22) | 0.438 | 0.04 (0.01-0.18) | 0.039\* | 0.01 (-0.06-0.05) | 0.886 |
| FPG  | 2231 | -0.05 (-0.13- -0.02) | 0.044\* | -0.05 (-0.23-0.12) | 0.540 | -0.05 (-0.21-0.06) | 0.431 | -0.05 (-0.10 - -0.03) | 0.040\* | -0.01 (-0.09-0.03) | 0.310 |
| Fasting Insulin  | 2231 | 0.05 (0.01-0.09) | 0.012\* | 0.03 (-0.18-0.16) | 0.935 | 0.04 (-0.04-0.27) | 0.153 | 0.05 (0.02-0.09) | 0018\* | 0.01 (-0.03-0.10) | 0.993 |
| BMI | 2231 | 0.04 (0.02-0.07) | 0.045\* | 0.03 (-0.02-0.07) | 0.252 | 0.03 (-0.02-0.67) | 0.218 | 0.04 (0.04-0.10) | 0.049\* | 0.03 (-0.04-0.04) | 0.158 |
| 1Not adjusted for in BMI analysis2Not adjusted for in HOMA/FPG/FI analysis  \*Indicates p<0.05 |

Supplementary Data Table 2: Complete cases: Cross-sectional associations between dysglycaemia/BMI and depressive episode (age 18 years)

|  |  |  |  |
| --- | --- | --- | --- |
| **Predictor** |  | **Odds Ratio (95% C.I.) for Depressive Episode** |  |
|  |  | **Adjustments**  |  |
|  | **Unadjusted Model** | **Demographic adjustments**(sex, birth social class, ethnicity, maternal education, maternal EPDS score) | **Lifestyle adjustments**(BMI1, HOMA22, smoking, alcohol use, physical activity) | **Immune adjustments**(IL-6 (9y), CRP (18y)) | **Complete model** (all adjustments) |
| **Depressive Episode** |  |
|  | **n outcome** | **n** | **OR (95% C.I.)** | **p** | **OR (95% C.I.)** | **p** | **OR (95% C.I.)** | **p** | **OR (95% C.I.)** | **p** | **OR (95% C.I.)** | **p** |
| HOMA2 | 179 | 2231 | 1.26 (1.09-1.43) | 0.023\* | 1.01 (0.84-1.23) | 0.913 | 1.06 (0.91-1.24) | 0.341 | 1.25 (1.10-1.40) | 0.029\* | 1.02 (0.64-1.61) | 0.943 |
| FPG  | 179 | 2231 | 0.83 (0.56-1.23) | 0.353 | 0.79 (0.50-1.28) | 0.426 | 0.89 (0.76-1.04) | 0.152 | 0.84 (0.50-1.20) | 0.440 | 0.80 (0.49-1.29) | 0.355 |
| Fasting Insulin  | 179 | 2231 | 1.28 (1.10-1.45) | 0.045\* | 1.05 (0.87-1.26) | 0.644 | 1.10 (0.94-1.28) | 0.223 | 1.29 (1.09-1.47) | 0.049\* | 1.05 (0.66-1.66) | 0.837 |
| BMI | 179 | 2231 | 1.04 (0.95-1.13) | 0.327 | 1.03 (0.98-1.07) | 0.278 | 1.01 (0.97-1.06) | 0.502 | 1.03 (0.96-1.14) | 0.401 | 1.02 (0.97-.13) | 0.573 |
|  | 1Not adjusted for in BMI analysis2Not adjusted for in HOMA/FPG/FI analysis  \*Indicates p<0.05 |