

## 探討懷孕第二期體重增加快速之孕婦其血糖變化與懷孕結果

### **Blood glucose and pregnancy outcome in pregnant women with rapid weight gain in the 2nd trimester**

#### 中文摘要

本研究主要目的是回溯探討懷孕第二期體重增加快速之孕婦其血糖變化與懷孕結果。自 2000 年 1 月至 12 月，收集台北市臺安醫院，產科有產下活嬰婦女之病歷：20~45 歲之間的婦女，懷孕第二期體重快速在一個月內平均增加三公斤以上，為單胞胎，胎次為二胎次以下，排除孕前有死產、自然流產、早產，糖尿病家族史、高血壓、妊娠糖尿病等。記錄孕婦 50 及 100 公克葡萄糖耐受性血糖值、孕前 BMI、年齡、生產週數及方式、嬰兒出生體重，懷孕第二期每次產檢所紀錄的體重、懷孕總體重增加量、生產時併發症。所有數據以皮爾森氏相關係數（Pearson's correlation coefficient）及卡方檢定（ $\chi^2$  test）進行分析。有效樣本共為 903 名婦女，結果顯示懷孕第二期體重增加快速之孕婦對血糖值及嬰兒出生體重是沒有影響的。但懷孕期總體重量增加愈多者及孕前 BMI 值越高者對懷孕結果是有影響的，如：剖腹產、陰道生產、生產時撕裂傷程度、出現尿糖及尿蛋白人數的百分比會愈高（ $P < 0.05$ ）。另外懷孕期總體重量增加愈多者及孕前 BMI 值越高者和年齡愈大者，對於罹患妊娠糖尿病人數的百分比也有愈高的比率（ $P < 0.05$ ）。綜而言之，懷孕第二期體重增加快速者對血糖及嬰兒出生體重是沒有影響。

關鍵字：懷孕體重增加量、妊娠糖尿病、嬰兒出生體重、懷孕結果

#### 英文摘要

This prospective study investigated changes in blood glucose and pregnancy outcome of pregnant women with rapid weight gain in the 2nd trimester of pregnancy. The pregnant women of 20~45 years old with single live birth, parity no more than 2, and rapid weight gain (more than 3 kg/month) in the 2nd trimester of pregnancy were screened from the medical records in Taiwan Adventist Hospital from January to December 2000. The women with stillbirth before pregnancy, natural abortion, a premature infant, diabetes family history, hypertension, gestational diabetes were excluded in this study. Blood glucose after oral glucose tolerance test at the doses of 50 and 100 g, body mass index (BMI) before pregnancy, age, pregnant weeks, delivery, birth weight of the infants, recorded body weight in the 2nd trimester of pregnancy, total weight gain during pregnancy, and labor complications were recorded. All data were analyzed by Pearson's correlation coefficient and  $\chi^2$  test. The number of samples was 903 women. The results showed that blood glucose and birth weight of the infants did not affected by rapid weight gain in the 2nd trimester of pregnancy.

However, total weight gain during pregnancy and BMI before pregnancy influenced pregnancy outcome, including Caesarean section (CS) delivery, vaginal delivery, tear degree, urinary glucose and protein, which percentage increased significantly ( $P < 0.05$ ) as increasing total weight gain during pregnancy and BMI before pregnancy. Additionally, the incidence of gestational diabetes increased significantly ( $P < 0.05$ ) as increasing total weight gain during pregnancy, BMI before pregnancy, and age of pregnant women. In conclusion, blood glucose and birth weight of the infants did not affected by rapid weight gain in the 2nd trimester of pregnancy.

Keywords: pregnant outcome, pregnant weight gain, gestational diabetes, birth weight