

飲食介入對妊娠糖尿病孕婦的血糖控制效果之評估

The Evaluation of Dietary Intervention on the Blood Glucose Level of Gestational Diabetes Mellitus Pregnant Women

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摘要

本研究之主要目的是擬藉由飲食介入來探討飲食控制對妊娠糖尿病(GDM)孕婦的血糖控制及嬰兒體位等之影響。受試者選自於 86 年 12 月至 87 年 11 月間至台北醫學院附設醫院產檢之懷孕 24~28 周的孕婦，先進行 50g 葡萄糖耐受性(OGTT)篩選，若血糖 $\geq 135\text{mg/dL}$ ，則通知孕婦進行空腹 100g OGTT 測試，如果血糖仍然異常則成爲本研究的受試者，由營養師進行飲食評估及指導。本研究共收集 332 位孕婦，有 98 人經 50g OGTT 篩選異常，佔總人數 30%，其中有 73 人進一步進行 100g OGTT 測試，有 17 人 100g OGTT 異常，佔總人數 5.4%，並有 11 位接受飲食指導；另外有 15 位受試者爲葡萄糖耐性障礙者，佔總人數的 4.5%。

結果顯示，受試者 50g OGTT 的血糖平均值隨著年齡及懷孕前之身體質量指數 (Body mass index, BMI) 增加有逐漸升高的趨勢，其中年齡 31~35 歲及 >35 歲這兩組分別與 <25 歲組有統計上的差異，而 BMI>24 這組則分別與 BMI<19 與 BMI 19~24 這兩組有統計差異。在進行 100g OGTT 時其血糖平均值亦有相似的結果，其中 BMI>24 這組空腹血糖及服用糖水後 1 小時及 2 小時的血糖濃度明顯高於 BMI<19 及 BMI 19~24 這兩組。經飲食指導後，孕婦之空腹血糖值明顯降低，尿糖及尿酮亦有改善的現象，顯示經過飲食控制可以使 GDM 的孕婦其血糖獲得改善。此外，發現有飲食指導這組，嬰兒體重百分比（以周數百分比表示）平均約爲 68%，而無飲食指導組嬰兒體重百分比平均則約爲 80%。因此本研究再次證實 GDM 的篩選及適當與良好的飲食控制對孕婦而言是非常重要的，尤其是年齡大於 30 歲或孕前 BMI>24 之孕婦。

Abstract

Gestational diabetes mellitus (GDM) is a complicated syndrome during pregnancy and screening is important because early therapy can prevent much of the associated perinatal morbidity. The objective of this study is to

evaluate the influence of dietary intervention on the blood glucose level of GDM pregnant women and the growth condition of neonates. Three hundred thirty-two pregnant women between the 24th and 28th week of gestation, who were attending the antenatal clinic were screened using a 50g oral glucose tolerance test (OGTT). Those who had a 1-h plasma glucose greater than 135 mg/dL subsequently underwent a 3-h 100g OGTT. Seventeen (5.4%) of the 332 women were diagnosed as GDM. Eleven GDM women had conducted dietary intervention to manage the blood glucose level. There was a progressive increase in screening plasma glucose levels and a significantly higher incidence of GDM with increasing maternal age and body mass index (BMI). After dietary intervention, the blood glucose level decreased significantly, urinary sugar and ketone level also decreased. The body weight for gestational age of neonates was decreased and kept within normal range for the dietary-intervention group. These results reemphasize the importance of screening of GDM and the dietary control of GDM, especially in BMI>24 or >30 year-old pregnant woman

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