The association of maternal body composition and dietary intake with the risk of gestational diabetes mellitus during the second trimester in a cohort of Chinese pregnant women

XU Qing
Chinese PLA General Hospital, China

The study investigate the association of maternal body composition and dietary intake with the riskof gestational diabetes mellitus (GDM). A total 154 GDM subjects and 981 controls were enrolled in a prospective cohort study in 10 11 hospitals from May 20, 2012 to December 31, 2013. Bioelectrical impedance analysis and dietary surveys were used to determine body composition and to evaluate the intake of nutrients in subjects at 21-24 weeks' gestation (WG). Logistic regression analysis was applied to explore the relationships of maternal body composition and dietary intake with the risk of GDM morbidity. Age, pre-pregnant body weight (BW), and body mass index (BMI) were associated with increased risk of GDM. Fat mass (FM), fat mass percentage (FMP), extracellular water (ECW), BMI, BW, energy, protein, fat, and carbohydrates at 21-24 WG were associated with an increased risk of GDM. In contrast, fat free mass (FFM), muscular mass (MM), and intracellular water (ICW) were associated with a decreased risk of GDM. Maternal body composition and dietary intake during the secondtrimester of pregnancy were associated with the risk of GDM morbidity.

e: aqing_930@163.com