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**Association of oxidative stress induced by iron status to the risk of Gestational Diabetes Mellitus- A pilot study**

Samar Rachidi, Salam Zein, Mayass Msheik, Sanaa Awada, Amal Hajj, Pascale Salameh, Ahmad Yassine, Wafaa Bawab and Isabelle Hinninger-Favier  
Lebanese University, Lebanon

We aim to evaluate the role of elevated oxidative stress mediated by iron stores as a predictive factor for Gestational Diabetes Mellitus (GDM) risk. Iron status was evaluated by ferritin levels at early pregnancy and biological markers of oxidative damage were assessed between 24 to 28 weeks of gestation at the time of GDM diagnosis in 93 non-anemic and non iron-supplemented pregnant women. We carried out a stratified analysis for biological markers of oxidative damage and redox status, to set if these variables are associated with Gestational Diabetes Mellitus in strata of ferritin  $<13 \mu\text{g/L}$  and ferritin  $\geq 38.5 \mu\text{g/L}$  (the lowest and the highest quartile of ferritin values). Our results showed that ferritin was a modifying factor for the correlation of glutathione reductase ( $\rho=0.545$ ;  $p=0.005$ ) and Plasma thiobarbituric acid reactive substances TBARS ( $\rho=0.432$ ;  $p=0.031$ ) with glucose intolerance. Increased iron stores could be a predictive factor for the risk of GDM. Iron supplementation could be avoided in women without diagnosed anemia.

**Biography**

Samar Rachidi is a Professor at the Faculty of Pharmacy- Lebanese University, responsible of Clinical Nutrition and Fundamental Nutrition, Chronic Patient Education in the master degree. She has a PhD degree in Clinical Biochemistry and a Doctor in Pharmacy degree. She is the part of a research group at the Faculty of Pharmacy. Her work and studies are focused on Clinical Pharmacy and Pharmaco-Epidemiology in different sectors (Gestational diabetic patient and quality of life of diabetic, medication errors in the Lebanese hospitals, outcome of the consumption of energy drink, etc.). She is responsible of DU program which is a partnership project between the private Pharmaceutical sector and the Public Health sector across the Lebanese territory. She is leading the PharmD official degree, delivering a formation including pharmaceutical care, patient education, and prescription analysis and intervention. She is responsible for the training program inside the community pharmacies in partnership with the pharmacists order, including the students repartition, skills and assessment of competencies. She has led the clinical pharmacy department managing the relation with different internal and external customers.

[samar.rachidi@outlook.com](mailto:samar.rachidi@outlook.com)

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