**INFORMATION ON NEW FINDINGS OF DISSERTATION**

Dissertation title: ***Study of relationships between plasma 25-hydroxyvitamin D and insulin resistance, and effects of vitamin D supplementation on insulin resistance in gestational diabetes mellitus.***

Specialty: Endocrinology Code number: 62720145

PhD Student: Le Quang Toan

Supervisors: 1. Assoc. Prof., PhD. Do Trung Quan; 2. PhD. Nguyen Van Tien

Educational Institution: Hanoi Medical University

**New findings:**

**1. Prevalence of vitamin D insufficiency in pregnant women with gestational diabetes mellitus (GDM):** Pregnant women are at high risk of vitamin D insufficiency implicated in increased insulin resistance that is one of the principal physiopathological factors of GDM. In Vietnam until now, vitamin D insufficiency has never been studied in pregnant women with GDM. The present study found very high vitamin D insufficiency prevalence in pregnant with GDM, which serves basis for establishing recommendations on routine detection of vitamin D insufficiency and supplementation of vitamin D for these women.

**2. Relationships between plasma 25-hydroxyvitamin concentration and insulin resistance in women with GDM:** The present study found inverse relationships between plamsa 25-hydroxyvitamin D and insulin resistance in women with GDM. The relationship is likely independent, which suggests that vitamin D insufficency can contribute to increased insulin resistance in GDM. The study results serve premiss for further research on effects of vitamin D supplementation on improving insulin resistance in GDM.

**3. Effects of vitamin D supplementation on insulin resistance in pregnant women with GDM:** The present study demonstrated that a higher vitamin D dose diminished insulin resistance increase during the period from the middle to the end of gestation compared with a lower vitamin D dose. The results serve basis for establishing recommendations on vitamin D supplementation for women with GDM as well as premiss for further research on effects of vitamin D supplementation for prevention and adjuvant treatment of GDM.

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