

NEW CONTRIBUTIONS OF THE THESIS

Name of doctoral thesis: **“Study of the relationships between serum 25-hydroxyvitamin D concentration and some related factors in type 2 diabetes patients”**.

Majors: **Internal medicine** Number: **9 72 01 07**

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Name of training institution: **Hue University of Medicine and Pharmacy
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Through the study of 214 patients with type 2 diabetes who were examined and treated regularly, the study has these contributions:

- This is the first clinical study in Vietnam to study the role of vitamin D in type 2 diabetes.
- The vitamin D deficiency rate of type 2 diabetes patients was 61,7%.
- The average concentration of 25(OH)D in the study group was $28,74 \pm 7,39$ ng / ml.
- Female patients, patients with overweight and obesity, abdominal obesity, high blood TC, high blood TG, hsCRP > 3mg/l, Go ≥ 7 mmol/l, HbA1c $\geq 7\%$, insulin resistance according to HOMA-IR index, irregular physical activity and patients with diabetes detected for more than 10 years have lower 25(OH)D concentration
- The prevalence of vitamin D deficiency was higher in the groups of female patients, overweight and obese, high blood TC levels, hsCRP>3mg/l, Go \geq 7mmol/l, insulin resistant according to HOMA-IR index and patients with diabetes detected for more than 10 years.
- Female gender , more than 10 years of diabetes history, overweight and obesity, high TC and Go levels factors have positive effects on the risk of vitamin D deficiency.
- The BMI, TC, TC/HDL-C, Go, HbA1c and HOMA-IR of patients with vitamin D deficiency were significantly higher than those without vitamin D deficiency.
- Vitamin D deficiency was associated with increased risk of obesity, abdominal obesity, high blood TC, hsCRP > 3mg/l, Go ≥ 7 mmol/l, and insulin resistance according to HOMA-IR index.
- Elevated 25(OH)D levels were associated with increased risk of overweight and obesity, abdominal obesity, high TC, TG, TC/HDL-C, Go, hsCRP, and insulin resistance according to HOMA-IR index.
- The results reveal the risk factors of vitamin D deficiency and the effects of vitamin D deficiency on some related factors in patients with type 2 diabetes.

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