

Evaluation thyroid disorders in patients with gestational diabetes

Abstract

Introduction: Autoimmune thyroid disease is a common disorder. Hashimoto thyroiditis and Graves disease are the most common type and they have a lot in common immunologically. Since glucose intolerance with variable severity started or is diagnosed during pregnancy first time, so has been stated gestational diabetes because the blood glucose level rises during pregnancy. So far, in some studies were evaluated the diabetes mellitus and GDM association with autoimmune thyroid disease and were reported inconsistent results. We intended to found thyroiditis disorder in patients with GDM by designing this study.

Material and Methods : This is a prospective and cross-sectional study. In this study, 70 pregnant women in the third trimester of pregnancy with GDM (case group) and 70 healthy pregnant women in the same way (control group) were enrolled. Thyroid function tests (including serum TSH, FT4 level measurement) and Anti-TPO auto antibodies were measured in all participants. Family background of the diabetes mellitus, GDM or thyroid disease was determined in both groups. Information of all patients was entered in check lists and after completing them obtained data were analyzed by SPSS v16 software.

Results : In currents study, 140 pregnant women were enrolled (70 persons in case group and 70 persons in control group). The average age of patients was 29.98 ± 6.23 years and in control group was 28.38 ± 6.15 years ($p=0.098$). In cases 27.1 percent with family background type $\square\square$, 2 percent with thyroiditis disorder history and 7.1 percent gestational diabetes history. The average of BMI in cases was 30.52 and in controls 29.58 ($p=0.225$). Obtained data showed that TSH level ($p=0.033$) and Anti- TPO ($p=0.001$) in cases were more than controls and FT4 ($p=0.001$) level was fewer.

Conclusion : The results showed that thyroid disorders in patients with gestational diabetes are more than the control group significantly. It is recommended in patients with gestational diabetes, thyroid function tests should be performed routinely.

Key words: Autoimmune thyroid disease, gestational diabetes, auto antibody