

## Original Paper

# Fructosamine and glycated hemoglobin level in pregnant women with abnormal glucose challenge test

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## Abstract

**Background and Objective:** Gestational diabetes is affected 3-12% of women and occurs at the final stage of second trimester. This study was done to determine the fructosamine and glycated hemoglobin level in pregnant women with abnormal glucose challenge test.

**Methods:** This case – control study was carried out on 96 pregnant women with glucose challenge test (GCT)>140 mg/dl as cases and 96 pregnant women with GCT<140 mg/dl as controls. The serum fructosamine and glycated hemoglobin determined using ELISA and chemical methods, respectively.

**Results:** In pregnant woman with abnormal GCT, there was a significant correlation with glycated hemoglobin and fructosamine. The glycated hemoglobin correlation was more significant compared to fructosamine (0.63 to 0.24). There was not significant correlation between GCT with fructosamine and glycated hemoglobin in individuals with normal GCT.

**Conclusion:** The measurement of glycated hemoglobin is more accurate than fructosamine in pregnant women with abnormal glucose challenge test.

**Keywords:** Gestational diabetes, Glycosylated hemoglobin, Glucose challenge test, Fructosamine

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