

# Use of glucose stabilizer technology in the management of acute hyperglycemia in pregnancy

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**OBJECTIVE:** Management of acute hyperglycemia continues to present a significant challenge. Web-based insulin software was initiated at a large, urban private hospital to improve glycemic control in patients with diabetes. There have been few studies in pregnancy that evaluate the effectiveness of web-based insulin software in pregnant patients. The purpose of this study is to evaluate the usefulness of this modality in pregnancy.

**STUDY DESIGN:** Pregnant patients with gestational, Type I or Type II IDDM with hyperglycemia from July 1, 2010 through July 1, 2011 were eligible to be enrolled for use of the stabilizer. Optimal glucose value was defined as less than 110 mg/dl. The coefficient was calculated assuming that a pregnant patients insulin needs would be increased approximately 2-fold. To prevent error, a designated nurse specialist was available for assist with implementation. Data was collected and analyzed using the standard web-based software program.

**RESULTS:** 25 patients with hyperglycemia were entered into this study. Type I-44%, Type II-36%; Gestational-20%. The average gestational age at the time of enrollment was 34.2 weeks. The average glucose at enrollment was 165.7 mg/dl. The average time to the target goal was 1.72 hours. There were no hypoglycemic episodes.

**CONCLUSION:** Web-based insulin software provides a safe and effective way to treat acute hyperglycemia in the pregnant population.