leads to earlier diagnosis, earlier intervention, and improved perinatal outcome when compared to the traditional 2-step method.

STUDY DESIGN: A retrospective cohort study was performed by reviewing the charts of all patients with GDM enrolled in our Diabetes in Pregnancy Program (DIPP) from January 2009-May 2012. Before 10/2010, the 2-step method was used, with a 50-gm OGCT followed by a 100-gm OGTT. From 10/2010, the 75-gm OGTT 1-step method was used, as recommended by the American Diabetes Association. Exclusion criteria included: <18 years of age and initial GDM screening or testing before 24 weeks or after 34 weeks gestation. Data extracted included demographics, method and timing of diagnosis, treatment specifics, glucose control, delivery data, and neonatal outcomes. Neonatal outcomes were excluded from analysis for patients with multiple gestation or delivery < 37 weeks. Statistical analysis was performed using Chi square and Student's t-test.

RESULTS: The study included 653 patients: 414 were diagnosed by the 2-step method and 239 by the 1-step method. The two groups differed with respect to gestational age (GA) at diagnosis, GA at entry into DIPP, GA at initiation of glyburide, GA at which good glycemic control was achieved, and medication dose at the end of pregnancy (Table). However, pregnancy outcome and newborn birthweight were similar in both groups.

CONCLUSION: Although the 1-step method leads to earlier diagnosis of GDM, earlier intervention, and achievement of glycemic control with lower doses of medications, it does not change neonatal outcome when compared to the traditional 2-step method.

	1-Step Method	2-Step Method	p
GA at OGTT (weeks)	26.2 ±1.73	28 ± 2.03	<0.001
GA at entry into diabetes program (weeks)	28.5 ± 2.35	29.9 ±2.32	<0.001
GA at glyburide start (weeks)	31.2 ± 2.81	32 ± 2.58	<0.05
Final glyburide dose (mg)	4.9 ±4.81	6.3 ± 4.38	<0.05
Final insulin dose (units/Kg)	50.5 ± 29.83	81.4 ± 64.01	<0.05
GA at achievement of glycemic control (weeks)	31.2 ± 2.8	32.7 ± 2.75	<0.001
GA at delivery (weeks)	39.2 ± 1.05	39.1 ± 0.96	0.8080
Birthweight (g)	3315.8 ± 390.15	3307.4 ±407.17	0.8085
Mean birthweight percentile	44.0 ± 25.17	44.3 ± 24.79	0.8944
% LGA	4.39	4.72	0.8578

Data presented as mean±SD or %.

265 Is the one-step test for the diagnosis of GDM a shortcut to achieving glycemic control?

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OBJECTIVE: Good glycemic control is the cornerstone of managing gestational diabetes (GDM). It is generally accepted that the earlier glycemic control is achieved, the better the outcome for mother and infant. We sought to determine whether using a 1-step method for screening and diagnosis of GDM leads to earlier glycemic control compared to the 2-step method.

STUDY DESIGN: A retrospective cohort study was performed by reviewing the charts of all patients with GDM enrolled in our Diabetes in Pregnancy Program (DIPP) from January 2009-May 2012. Before 10/2010, the 2-step method was used, with a 50-gm OGCT followed by a 100-gm OGTT. From 10/2010, the 75-gm OGTT 1-step method was used, as recommended by the American Diabetes Association. Patients were instructed to check fingerstick glucose with memory reflectance meters 4-7 times a day. Good glycemic control was defined as a mean glucose ≤ 100mg/dL over a period of 2 weeks. Failure to achieve good control with diet modification was followed by therapy with glyburide or insulin and doses were adjusted every week. The percent of patients who achieved good control was determined for the 1-step and 2-step groups at each gestational age. Statistical analysis was performed using Chi square and Student's t-test, as appropriate.

RESULTS: 566 patients for whom detailed glucose control data were available were included in this study. 332 patients were diagnosed by the 2-step method and 234 were diagnosed by the 1-step method. Patients' demographic characteristics did not differ significantly between these two groups. Patients in the 1-step group achieved good glycemic control significantly earlier than those in the 2-step group (table 1). Additionally, a larger percent of patients in the 2-step group never achieved glycemic control compared to the 1-step group ($p < 0.05$).

CONCLUSION: The 1-step method for the diagnosis of gestational diabetes leads to earlier glycemic control than the 2-step group.

Percent of patients achieving good glycemic control

Table 1.			
Gestational age at which glycemic control was achieved	2-Step	1-Step	p
< 28 weeks	0.6%	3.4%	<0.05
< 30 weeks	7.8%	26.5%	<0.001
< 32 weeks	30.1%	48.3%	<0.001
< 34 weeks	49.7%	62.8%	<0.05
< 36 weeks	61.4%	72.2%	<0.05
≥ 36 weeks	15.4%	12.4%	0.318
Never achieved good control	23.2%	15.4%	<0.05

266 Perinatal outcomes in patients with type 1 versus type 2 diabetes: a retrospective cohort study

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OBJECTIVE: To compare maternal and perinatal outcomes among patients with Type 1 Diabetes Mellitus (T1DM) and Type 2 Diabetes Mellitus (T2DM).

STUDY DESIGN: This was a retrospective cohort study of pregnant women with preexisting T1DM or T2DM delivering in California in 2006. Primary predictors included T1DM versus T2DM. Chi-squared tests, Fisher's exact tests, and multivariate regression analyses were performed to investigate the relationship between the primary predictors and a wide range of maternal and neonatal complications.

RESULTS: The study included 2787 women, of which 563 (20.2%) were complicated by T1DM and 2,224 (79.8%) by T2DM. In comparison to patients with T1DM, patients with T2DM had lower rates of preterm delivery (18.6% vs 28.8%, $p<0.001$), fetal anomalies (9.0% vs 12.4%, $p=.014$), and neonatal respiratory distress syndrome (2.2% vs 6.4%, $p<0.001$). These lower rates of respiratory distress syndrome (RDS) were persistently lower in T2DM when examining term patients alone (0.39% vs 2.0%, $p=0.002$). When controlling for potential confounders, having T2DM versus T1DM was associated with lower risks of RDS (AOR 0.47, 95% CI 0.28-0.81) and preterm delivery (AOR 0.58, 95% CI 0.46-0.72).

CONCLUSION: Women with T1DM have higher rates of fetal anomalies, preterm delivery, and neonatal RDS than patients with T2DM. The mechanism of increased RDS in T1DM requires further study.

Perinatal outcomes in type 1 vs type 2 diabetes mellitus

Perinatal Outcome	T1DM	T2DM	p-value	aOR	95%CI
Preeclampsia	14.2%	10.1%	0.01	0.86	0.64-1.15
Cesarean Section	61.8%	57.4%	0.06	1.02	0.75-1.39
Shoulder Dystocia	2.2%	1.7%	0.26	0.88	0.44-1.75
Hypoglycemia	2.0%	1.3%	0.29	0.89	0.43-1.85
Jaundice	25.8%	22.3%	0.05	1.01	0.80-1.27
Preterm Delivery	28.8%	18.6%	<0.001	0.58	0.46-0.72
Respiratory Distress Syndrome	6.4%	2.2%	<0.001	0.47	0.28-0.81
Stillbirth	1.5%	1.2%	0.59	1.85	0.51-6.69
Fetal Anomaly	12.4%	9.0%	0.01	0.71	0.52-0.97
SGA <10%il	11.1%	12.8%	0.35	1.22	0.86-1.75
Birth Weigh > 4000g	11.9%	12.4%	0.76	1.06	0.78-1.43