GLARGINE INSULIN TREATMENT DURING PREGNANCY IN TYPE 1 DIABETES MELLITUS

Moreno Moreno, P; Palomares Ortega, RJ; Muñoz Jiménez, C; Gálvez Moreno, MA Management Unit of Clinical Endocrinology and Nutrition. University Hospital Reina Sofia. Córdoba. Spain.

OBJECTIVE

The aim of this study was to evaluate maternal and neonatal outcomes in women with Type 1 Diabetes Mellitus (DM-1), and analyzing differences associated to insulin glargine exposure during pregnancy.

PATIENTS AND METHODS

Retrospective descriptive study of pregnancies in women with DM-1 (2004-2012). Variables analyzed: baseline characteristics (age, time of diabetes evolution, microvascular complications, weight), maternal outcomes (weight gain, HbA1c, hypoglycemia, preeclampsia, abortions, vaginal delivery and cesarean section) and neonatal outcomes (gestational age at delivery, birth weight and congenital malformations). The pregnancies were divided in groups attending to their exposition to glargine insulin and were analyzed to evaluate possible differences between them (group 1: exposed, group 2: unexposed). Statistical analysis: comparing proportions with the chi-squared and comparing means with Student's test.

RESULTS

132 pregnancies in women with DM-1 Group 1: 43.2%, group 2: 56.8%.

Baseline characteristics were similar in both groups

HbA1c (%)	Group 1	Group 2
Before pregnancy	7,95 p=0	7,02
First trimester	6,83 p=0	6,47
Second trimester	6,45 p=0	,92 6,33
Third trimester	6,67 p=0	,88 6,42

Maternal weight gain was similar: Group 1 vs group 2: 10,28 Kg vs 11,02 Kg (p=0,4)

Maternal outcomes	Group 1	Group 2
Abortions (%)	2 p	=0,05
Caesarean section (%)	31,5 p	=0,005 52
Gestational age at delivery (week)	38,02 p	=0,92 38,12

Neonatal outcomes	Group 1		Group 2
Macrosomia (%)	23	p=0,29	18
Congenital malformations (%)	23	p=0,49	28
Hipoglycemia (%)	2	p=0,13	7

CONCLUSIONS

The number of caesarean sections was higher in women not exposed to insulin glargine. Insulin glargine use before and during pregnancy is not associated with worse maternal and neonatal outcome, or congenital malformation.





