P-0734 – NEONATAL OUTCOMES IN WOMEN WITH GESTATIONAL DIABETES INTEGRATED TO AN INTENSIVE CONTROL PROGRAM.

Violante Rafael, Requena Claudio, Amaya Luis, Gutierrez Jordi, Tabet Meruan Lozano Isauro, Reta Rodolfo.

Endocrinology Department. Regional General Hospital No. 6 Cd. Madero, Tam Social Security Institute.

INTRODUCTION: Gestational diabetes mellitus (GDM) is the type of diabetes that is generally diagnosed during the second or third trimester of pregnancy. The prevalence in Mexico is from 8% to 23%. The main neonatal outcomes observed in patients with gestational diabetes are macrosomia, hypoglycemia, prematurity, respiratory distress syndrome, acute fetal distress, jaundice and congenital malformations.

OBJECTIVE: Compare neonatal outcomes between women with gestational diabetes integrated to an intensive control program and those without the condition.

MATERIAL AND METHODS: Cohort study, prospective, conducted on pregnant women with GDM and without GDM diagnosis, performing an oral glucose tolerance test (OGTT) 75gr, in accordance to American Diabetes Association criteria (ADA), performed at the General Regional Hospital #6 of Cd. Madero, Tamaulipas. 354 patients were included (177 on each group), between December 2009 to May 2018. Maternal data was collected: Age, weight, height, body mass index (BMI) and from the newborn: Gestational Age (GA), hydramnios, delivery mode, neonatal morbidity, in both groups. Patients with GDM were included in an intensive program based on dates every 1-4 weeks (according to needs), monitoring and follow up was completed online, nutritional advice, treatment adjustment and assistance in pregnancy resolution. Data was submitted to statistical analysis through the statistic package SPSS.

RESULTS: We collected the data of the 354 patients. The mean age in the group with GDM was 31.9 years old (± 5.5), whereas the age in the group without GDM was 28.2 (± 5.4). Women exposed to a mean weight of 80.2kgs (± 16.6), whilst the ones not exposed was

70.9kg (± 15.1), with an average height of 1.58 meters (± 0.06) for those women with GDM and 1.57 meters (± 0.06) without GDM. The mean BMI in the GDM group was of 31.8 (± 5.6) and 28.2 (± 5.4) without GDM. Regardless of this, there were no statistically significant differences in some of the complications such as Acute Fetal Distress ($p=0.75$), jaundice ($p=0.06$), Oligohydramnios ($p=1.00$) and Polyhydramnios ($p=0.38$) as well as macrosomia ($p=1.0$).

	Study Groups		RR	IC 95%	p*
	GDM (n=177)	Normal (n=177)			
<u>Respiratory distress syndrome</u>	22	8	2.7	1.25-6.93	0.008
<u>Prematurity</u>	21	10	2.1	1.01-4.33	0.039
<u>Caesarean birth</u>	146	93	1.5	1.34-1.83	0.000
<u>Acute Fetal Distress</u>	6	5	1.2	0.37-3.86	0.759
<u>Jaundice</u>	7	1	7.0	0.87-56.30	0.067 ^a
<u>Macrosomia</u>	9	9	1.0	0.40-2.46	1.000
<u>Hydramnios</u>					
Normal	169	166	1.01	0.96-1.07	0.479
<u>Oligohydramnios</u>	7	7	1.0	0.35-2.79	1.000
<u>Polyhydramnios</u>	1	4	0.250	0.02-2.21	0.371 ^a

The relative risk (IC 95%) for respiratory distress syndrome, prematurity and for a c-section as a growth pathway in the group with GDM was 2.7 (1.25-6.93; $p=0.008$), 2.1 (1.01-4.33; $p=0.039$) and 1.5 (1.34-1.83; $p=0.000$) correspondingly. No perinatal deaths, or congenital malformations were reported.

CONCLUSIONS: The intensive management of women with GDM can significantly reduce some of the complications typically recognized in these type of patients such as macrosomia, hypoglycemia, SFE and hydramnios, to the point of not finding any statistical significant differences in either groups, despite of having a greater age, weight and obesity percentage.

*Mary Helen Black, et al. Clinical Outcomes of Pregnancies Complicated by Mild Gestational Diabetes Mellitus Differ by Combinations of Abnormal Oral Glucose Tolerance Test Values. Diabetes Care, December 2010, Volume 33, Number 12. *Schmidt Maria I., et al. Gestational Diabetes Mellitus Diagnosed with a 2-h 75-g Oral Glucose Tolerance Test and Adverse Pregnancy Outcomes. Diabetes Care, July 2001, Volume 24, Number 7. *Gonzalez Quintero Victor Hugo, et al. The Impact of Glycemic Control on Neonatal Outcome in Singleton Pregnancies Complicated by Gestational Diabetes. Diabetes Care, March 2007, Volume 30, Number 3. *The HAPO Study Cooperative Research Group. Hyperglycemia and Adverse Pregnancy Outcomes. N Engl J Med 2008; 358:1991-2002