Table 2: The significance of clinical parameters in the likelihood of detecting CMA abnormality

Parameter	Normal CMA, N (%)	Abnormal CMA, N (%)	Total	P-value
Gestational age at diagnosis ≥16	36 (81.8)	8 (18.2)	44	.016
Gestational age at diagnosis <16	18 (66.7)	9 (33.3)	27	
Gestational age at diagnosis ≥24	9 (90.0)	1 (10.0)	10	.043
Gestational age at diagnosis <24	45 (73.8)	16 (26.2)	61	
Age ≥35	11 (64.7)	6 (35.3)	17	0.17
Age <35	43 (79.6)	11 (20.4)	54	
Age ≥40	4 (44.4)	5 (55.6)	9	0.03*
Age <40	50 (80.6)	12 (19.4)	62	
Normal nuchal translucency (<3 mm)	42 (79.2)	11 (20.8)	53	0.67
Elevated nuchal translucency (≥3 mm)	7 (70.0)	3 (30.0)	10	
Normal aneuploidy screening test	32 (84.2)	6 (15.8)	38	0.02*
Elevated risk according to aneuploidy screening tests	4 (44.4)	5 (55.6)	9	
Isolated organ malformation	27 (84.4)	5 (15.6)	32	0.17
Multiple organs malformations	27 (69.2)	12 (30.8)	39	

*Statistically significant finding (p <0.05)

390 High Density Lipoprotein: composition and function in patients with Gestational Diabetes Mellitus

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OBJECTIVE: Gestational diabetes mellitus class A2 (GDMA2) has short- and long-term effects on the mother and child, including placental abnormalities with endothelial damage and future cardiovascular disease. Trans- placental fatty acid and lipoprotein transport and turnover, including high density lipoproteins (HDL) might be involved in the pathophysiology related to GDMA2. The aim of this study is to assess changes in HDL quantity, qualitative composition and function among patients with GDMA2, the placentas and the neonates.

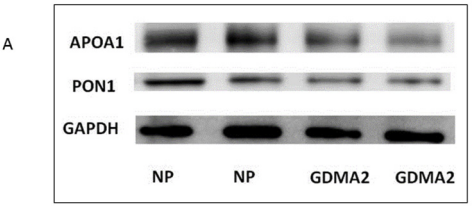
STUDY DESIGN: Thirty pregnant women (20 with GDMA2 and 10 with normal pregnancy (NP)) were recruited during admission for delivery. Blood samples were obtained from the parturients and umbilical cords, as well as placental tissue. Lipid profiles and

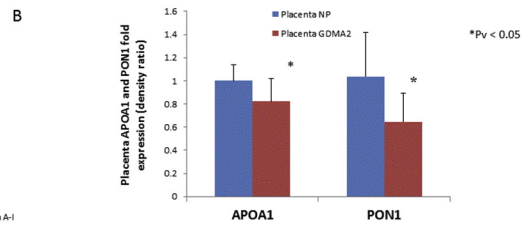
Apolipoprotein A-I (APOA1) levels were assessed in blood samples. HDL and its associated proteins: Paraoxonase-1 (PON1) and APOA1 function and expression were examined in maternal blood and placental tissue. An *in vitro* model of endothelial cells was used to evaluate the effect of HDL on cell migration.

RESULTS: APOA1 (mg/dl) was lower in the maternal plasma of GDMA2 patients compared to NP (203±40 vs. 242±40; P=0.04). Maternal HDL release of APOA1 and PON1 was increased in GDMA2 compared to NP (1.97±1.1 vs. 1.0±0.18, P=0.027; 2.71±1.0 vs. 1.0±0.31, P<0.0001, respectively). Placental APOA1 and PON1 protein expression was lower in GDMA2 compared to NP (0.82±0.19 vs. 1±0.13, P=0.001; 0.63±0.24 vs. 1.03±0.37, P<0.0001, respectively). Lipid profile and APOA1 were similar in umbilical cord blood from GDMA2 and NP. HDL cell migration test in endothelial cells stimulated by the inflammatory factor TNFα was increased when cells were manipulated with GDMA2-HDL compared to NP-HDL (P<0.05).

CONCLUSION: GDMA2 affects plasma HDL composition and function. Interestingly, HDL changes typical to GDMA2 are observed in maternal and placental samples but not in cord samples. These results might imply a placental role in protecting the fetus and require further investigation.

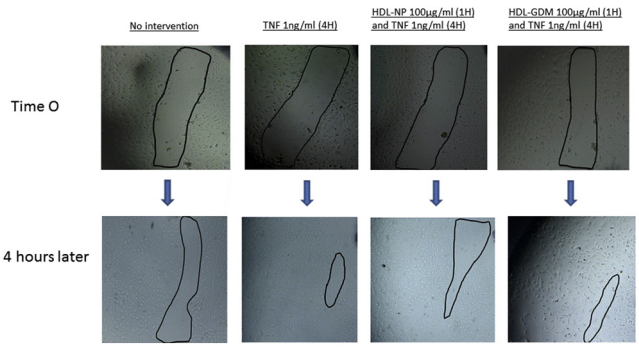
Figure 1. Placental expression of APOA1 and PON1 in Gestational Diabetes Mellitus (GDMA2) and Normal Pregnancy (NP) by Western Blot





Aberrations:
Apo A1: Apolipoprotein A-I
PON1: Paraoxonase1
GAPDH: Glyceraldehyde 3-phosphate dehydrogenase: A housekeeping gene used as a loading control for western blot

Figure 2: Human umbilical vein endothelial cell scratch assay- cell migration test with Tumor Necrosis Factor (TNF) and High Density Lipoprotein (HDL) of Gestational Diabetes Melitus (GDM) and Normal Pregnancy (NP)



391 Maternal and neonatal outcomes of attempted vaginal delivery in women with triplet pregnancies

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OBJECTIVE: In triplet pregnancy, cesarean section is usually recommended as a mode of delivery. However, we have tried vaginal delivery in women with triplet pregnancy who are candidates for and want trial of labor (TOL). We have already experienced over one