glucose tolerance were compared in terms of obesity, hypertension, serum lipid profile, and neonatal birth weight. Hypertriglyceridemic and normotriglyceridemic patients were compared regarding maternal metabolic syndrome criteria and neonatal birthweight.

Results: Diabetic pregnants had significantly higher body mass index and triglyceride levels and lower high-density lipoprotein levels than non-diabetics. The hypertension rate was also higher; however, it was not statistically significant(Table 1). Those with hypertriglyceridemia had higher body mass index, HbA1c level, and neonatal birth weight in the diabetic group (Table 2). Triglyceride level did not impact neonatal birthweight in non-diabetic patients. Obesity, high HbA1c and triglyceride levels, and low high-density lipoprotein levels were the parameters leading to fetal macrosomia in gestational diabetes.

Table 1. Lipid Profile HbA1c and rate of hypertansive diseases in the NGT and GDM groups.

	NGT (n=93)	GDM (n=83)	
TG (mg/dl)	181.1 ± 62.8 176 (80-375)	245.1 ± 90.1 226 (115-522)	**< 0.001**
LDL (mg/dl)	135.5 ± 41.8 130 (60-305)	124.3 ± 52.0 116 (33-420)	0.121
Total cholesterol (mg/dl)	250.4 ± 45.6 245 (155-392)	226.0 ± 47.8 226 (66-342)	0.001
HDL (mg/dl)	81.4 ± 21.2 78 (47-187	59.6 ± 16.0 59 (33-107)	**< 0.001**
HbA1c (%)		5.7 ± 0.8 6 (5-10)	
HDP	7 (7.5%)	13 (15.7%)	**0.090***

Table 2. Comparison of the hypertriglyceridemic and normtriglyceridemic groups among the GDM patients

	TG< 200 (n=26)	TG ≥ 200 (n=57)	p
Age	31.9 ± 5.6 32 (19-42)	33.4 ± 4.6 33 (23-42)	0.200
BMI	25.1 ± 3.2 25 (20-32)	28.4 ± 4.8 27 (20-41)	**0.001**
Total Weight Gain	12.6 ± 4 14 (6-22)	14.1 ± 5 14 (6-30)	0.194
HbA1c (%)	5.4 ± 0.5 5(5-6)	5.8 ± 0.9 6 (5-10)	**0.013**
Birth weight	3492 ± 368 3510 (2890-4020)	3725 ± 612 3700 (2340-5390)	0.077
LGA newborn	10 (38.5%)	26 (45.6%)	0.779
HDP	2 (7.7%)	11 (19.3%)	0.177

Independent sample test/Chi-square test

Discussion: The extension of the changes in maternal lipid and carbohydrate metabolism to support fetal growth differs depending on the gestational diabetes status. The studies in the literature report that despite adequate glycemic control proved by standardized measures like fasting, 1st-hour, and 2nd-hour blood glucose levels or HbA1c level, macrosomia rates are higher in pregnant women with gestational diabetes. This raises the question of whether there are other factors leading to macrosomia in insulin-resistant patients.[3]

Conclusion: GDM is a pathology related to several metabolic disorders, such as obesity, insulin resistance, hyperlipidemia, and hypertension. All of these disorders are components of metabolic syndrome interacting with each other, changing the intrauterine environment and leading to fetal macrosomia. The prevention of obesity in reproductive age, the prevention of excessive weight gain throughout pregnancy, and more liberal use of anti-diabetic agents to avoid the lipolytic effects of insulin resistance in gestational diabetes, instead of insisting on long-term dietary restrictions, may decrease the macrosomia risk.

Keywords: Gestational diabetes, insulin resistance, macrosomia, metabolic disorder

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OP-09 Treatment modalities in twin reversed arterial perfusion

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Objective: This study's objective was to examine the follow-up and treatment modalities applied to four cases of twin reversed arterial perfusion(TRAP) sequences observed in monochorionic twin pregnancies.

Methods: Four cases diagnosed with TRAP who applied to the perinatology clinic of Necmettin Erbakan University Meram Faculty of Medicine between 2019 and 2022 were included in the study. Written informed consent was obtained from all patients to present the cases. A karyotype study was performed on all cases, and the other baby was found to be healthy. Four cases were acardiac twins. The diagnosis of TRAP was confirmed

in all cases by demonstrating the retrograde perfusion from the pump twin to the acardiac twin using color flow Doppler. Perinatal outcomes of all cases were evaluated.

Results: The mean maternal age of the patients was 27.3 ± 6.08 years. The mean week of procedure was 18.5 ± 4.04, mean week of delivery was 31.7 ± 4.16. The time between the procedure and delivery was 13.2± 6.8 weeks. Cord coagulation was performed in the first case in the 24th week, and an 1100 g baby was delivered by cesarean section in the 28th week after preterm premature rupture of membranes (PPROM). Cord coagulation was performed in the second case at the 19th week, and she was delivered at 34 weeks with a weight of 2350 g due to preterm labor. Case 3 underwent radiofrequency ablation at 16 weeks, and was delivered by cesarean section at 36 weeks due to preterm labor. Intrafetal laser was applied to the fourth case in the 15th week. She was delivered in the 28th week by cesarean section due to PPROM, weighing 1110 grams. The last case resulted in neonatal death.

	Procedure week	procedure	Birth week	Delivery reason	The time between the procedure and birth	Neonatal outcomes
Case 1	24 W	Cord coagulation	28W	PPROM	4W	Healthy
Case 2	19 W	Cord coagulation	34W	Preterm labor	15W	Healthy
Case 3	16 W	ARF	36	Preterm labor	20 W	Healthy
Case 4	15	Intrafetal laser	28	PPROM	13 W	Die

Discussion: TRAP occurs in 1% of monochorionic pregnancies, 1 in 35000 of all pregnancies.It is characterized by the presence of a TRAP or acardiac mass perfused by an apparently normal (pump) twin. The risk of death of the pump fetus in the conservatively managed TRAP sequence is 30% at 18 weeks of gestation. Intrauterin fetoscopic methods such as cord coagulation, cord ligation, photocoagulation, RFA, and intrafetal laser therapy are used to prevent the death of the pump fetus.

Conclusion: Treatment modalities should be planned according to the gestational week, technical possibilities, and the experience of the team. It should be known that the morbidity of a healthy baby may increase due to premature birth in fetoscopic procedures.

Keywords: Cord coagulation, intrafetal laser, trap

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OP-10 Selective fetal reduction with intrafetal laser in twin-twin transfusion syndrome

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Objective: Twin-twin transfusion syndrome (TTTS) is a condition that complicates 10-15% of monochorionic twin pregnancies. Fetoscopic laser photocoagulation (FLP) is an established treatment. Selective fetal reduction (SFR) is one of the treatment options for TTTS. SFR can be performed by various methods.

Intrafetal laser is a medical procedure that uses lasers to treat certain conditions in fetuses while they are still in the womb. TTTS is used to treat conditions such as selective intrauterine growth restriction (sFGR), twins with reverse arterial perfusion (TRAP) and fetal tumours.

Here we report a rare case of intrafetal laser for SFR in a late-gestation MCDA twin pregnancy complicated by TTTS.

Case: A 26-year-old woman was referred to our clinic with a G2P1Y1, MCDA twin pregnancy at 20 weeks and 5 days. The first-trimester ultrasound was unremarkable. We diagnosed Quintero stage 4 by ultrasound. The following day, the patient underwent fetoscopic laser photocoagulation under general anaesthesia. The procedure was surgically successful and no intra- or post-operative complications were observed. Worsening hydrops in the recipient fetus and Doppler flow abnormalities in the ductus venosus were noted at 3 weeks after the procedure.

The selective fetal reduction was offered to the recipient fetus. SFR was performed by intrafetal laser at 24 weeks gestation.

Pregnancy is currently ongoing. At 34 weeks, the fetus currently has FGR. However, pregnancy follow-up will continue as Doppler flow is good.

Discussion: TTTS is a serious complication of monochorionic twin pregnancies. SFR is a treatment option for TTTS, especially in late stages or with a poor