

Selected Abstracts of the 20th National Congress of the Italian Society of Perinatal Medicine (*Società Italiana di Medicina Perinatale, SIMP*) • Session “Perinatal Miscellanea”

CATANIA (ITALY) • MARCH 22ND-24TH, 2018

SIMP PRESIDENT

Irene Cetin

CONGRESS PRESIDENTS

Nicola Chianchiano, Angela Motta

SCIENTIFIC COMMITTEE

Mariarosaria Di Tommaso, Gianpaolo Donzelli, Luca Ramenghi

Guest Editors: Irene Cetin, Nicola Chianchiano, Angela Motta



Organizing secretariat



48 h from the beginning of hypothermia and the neurodevelopmental outcome at 18 months.

ABS 10

PREGNANCY OUTCOME IN GESTATIONAL HYPERTENSION: A SINGLE CENTER EXPERIENCE

M. Barba, A. Lembo, S. Fruci, G. Del Sordo, F. Felici, S. Moresi, C. Martino, A. Lanzone, S. Ferrazzani

High Risk Pregnancies Unit, Department of Obstetrics, Gynecology and Pediatrics, Università Cattolica del Sacro Cuore, Rome, Italy

INTRODUCTION

Gestational hypertension (GH) remains a challenging diagnosis for the obstetricians since at first presentation of a new-onset high blood pressure after 20 weeks, it is difficult to know if a pregnant woman will develop preeclampsia (PE) or not. Aim of this retrospective study was to investigate pregnancy outcomes in singleton pregnancies complicated by GH in a tertiary referral Italian centre during the last four-year period; the rate of women who progress to PE and the maternal variables associated with the risk of progression were also analysed.

METHODS

A total of 514 pregnant women with diagnosis of GH at the admission were included. Among these women, two groups were identified: one without progression to PE (GH group, n = 454) and one with progression to PE (GHPE group, n = 60). In all cases, maternal age, parity, pre-conceptional BMI, mode of conception, number and type of antihypertensive therapies were recorded. Data on pregnancy outcome (gestational age at delivery, type of delivery, birth weight, birth weight percentile, Apgar at 1st and 5th minute) were collected from obstetric and neonatal records.

RESULTS

Among the 514 women affected by GH, 454 (88.3%) did not progress to PE, while 60 women developed PE. Then, in our series, the rate of progression from GH to PE was 11.7%. No difference in maternal age, parity and mode of conception was found between the two groups. A significant statistically difference in the maternal BMI was demonstrated between the two groups (GHPE 24.87 ± 6.42 vs GH 28.50 ± 7.57 , $p = 0.02$). Antihypertensive drugs were employed in 382 patients (74.3%) while 132

(25.7%) women maintained after the diagnosis a good blood pressure's control without therapies. In the treated group, the rate of progression was 14.7%; on the other hand, in the non-treated group the diagnosis of PE was made in 3% of cases. Regarding perinatal outcome, gestational age at delivery, mean birth weight and mean birth weight centile were significantly lower in pregnancies which progressed to PE. A cesarean section was performed in 93.3% of the patients in the GHPE group while in the GH group 53.1% of women experienced a cesarean section ($p < 0.0001$). Apgar score was lower both at 1st and 5th minute in the GHPE group in comparison to the GH one ($p = 0.001$). No difference in the rate of SGA neonates was demonstrated between the two groups ($p = 0.066$).

CONCLUSIONS

Our data confirmed that the worsening in perinatal outcomes observed in GH pregnancies is mainly due to the progression to PE in terms of duration of pregnancy, birth weight and Apgar scores. However, similar rate of SGA neonates was found. These observations added evidence that GH may share with PE similar maternal risk factors and neonatal outcomes. For these reasons, an accurate maternal and fetal monitoring is desirable in all pregnant women with a diagnosis of a new-onset raised blood pressure with and without sudden evidence of organ dysfunction.

ABS 11

THE ROLE OF OBESITY AND GESTATIONAL DIABETES ON PLACENTAL EFFICIENCY AND FETAL OXYGENATION

C. Bianchi, E. Taricco, G. Anelli, C. Novielli, C. Mandò, M. Cardellicchio, I. Cetin

Unit of Obstetrics and Gynecology, ASST Fatebenefratelli Sacco, University of Milan, Milan, Italy

INTRODUCTION

Maternal pregestational obesity is a significant risk factor for adverse pregnancy outcomes, such as gestational diabetes. Both these conditions can have an impact on placental development and affect maternal-fetal exchanges, compromising fetal metabolic status. The aim of the study is to investigate the influence of pre-pregnancy BMI on placental biometry and efficiency and to evaluate the role of gestational diabetes on fetal oxygenation in overweight and obese pregnant women.

METHODS

We enrolled 208 normal-weight (NW), 57 overweight (OW) and 69 obese (OB) women at the time of elective caesarean section. 10 OW pregnancies (18%) and 24 OB pregnancies (35%) were complicated by gestational diabetes (GDM). Maternal, fetal and placental data were collected. Respiratory gases, acid-base balance and lactate concentrations were measured in umbilical venous and arterial blood samples.

RESULTS

Gestational weight gain was significantly lower in OB women (NW = 12.99 ± 4.48 kg; OB = 8.03 ± 6.16 kg, $p < 0.001$) and within standard recommendations (IOM: 5-9 kg). OW mothers had a weight gain during pregnancy not significantly different from NW (OW = 12.11 ± 4.80), but they exceeded standard limits (IOM: 7-11.5 kg). We didn't find significant differences about gestational age, fetal weight and fetal biometry. Placental weights were significantly higher in OB pregnancies (NW = 457.67 ± 92.88 g; OB = 487.60 ± 92.81 g, $p < 0.05$), despite similar diameters and areas, and placental thickness was significantly higher in OB women, both with and without GDM (NW = 1.66 ± 0.32 cm; OB NON GDM = 1.94 ± 0.53 cm, $p < 0.01$; OB GDM = 2.00 ± 0.49 cm, $p < 0.01$). Significantly lower F/P weight ratios were found in GDM pregnancies, both OW and OB (NW = 7.42 ± 1.35 ; OW GDM = 6.39 ± 1.24 , $p < 0.05$; OB GDM = 6.45 ± 1.42 , $p < 0.05$). Fetuses from OB mothers were significantly more hypoxic and acidemic compared to NW fetuses (pO₂ UA: NW = 16.93 ± 8.63 mmHg; OB = 14.94 ± 7.83 mmHg, $p < 0.05$; lactate concentration UA: NW = 1.69 ± 0.49 mmol/L; OB = 1.99 ± 0.70 mmol/L, $p < 0.05$). Studying the effect of GDM, also fetuses from OW GDM women showed significantly lower values of pO₂ in umbilical artery (14.08 ± 3.18 mmHg, $p < 0.05$), and fetuses from OB GDM pregnancies the lowest pO₂ values (12.91 ± 7.00 mmHg, $p < 0.05$).

CONCLUSIONS

Our data show that women with an early nutritional and behavioral counseling, such as OB and GDM mothers, have a better metabolic control and an optimal growth environment for the fetus. We also found that placentas from OB and GDM pregnancies are heavier and thicker, suggesting that an unbalanced pregestational nutritional status can decrease the placental efficiency in maternal-fetal exchanges. Finally, fetuses from OB women are hypoxic and acidemic, while fetuses from GDM

mothers are hypoxic, reflecting that an altered pre-pregnancy BMI can affect fetal oxygenation, and GDM can further compromise placental efficiency.

ABS 12**A STRANGE CASE OF BIG PERINEAL MASS**

T. Izzo¹, S. Faiola¹, M. Lanna¹, F. Savi², A. Turri¹, G. Pavone¹, M. Pellegrino¹, I. Cetin³, M.A. Rustico¹

¹Fetal Therapy Unit "U. Nicolini", Vittore Buzzi Children's Hospital, University of Milan, Milan, Italy

²Department of Pathology, University of Milan, Medical School and "San Paolo" Hospital, Milan, Italy

³Department of Woman, Mother and Neonate, Buzzi Children's Hospital, Biological and Clinical Sciences, University of Milan, Milan, Italy

INTRODUCTION

This is a case report of a rare finding of a perineal mass in a male fetus, which posed a dilemma for a differential diagnosis between accessory scrotum and congenital lipoma.

CASE REPORT

A male fetus at 21 gestational age was referred to our unit with a suspicion of sacrococcygeal teratoma. The first ultrasound examination showed a 15 x 7 mm subcutaneous mass located on the perineum behind the scrotum, without sign of vascularization, suggesting it was not a teratoma. No other anomalies were detected. This mass was echoic, looked like a second scrotum, so a differential diagnosis was put between accessory scrotum (AS) and congenital lipoma. The pregnancy was uneventful until the birth of a male of 4,000 g at 40 weeks of gestational age. There was no complication at birth, but the mass was removed one day after the birth, since there were signs of initial torsion. The mass was described as pedunculated, far one cm from the basis of the scrotum. The surgery was uneventful and the baby was discharged after 6 days. The histologic exam described a benign mature lipoma, with mature adipose cells surrounded by connective tissue and covered by normal skin. There was no cellular atypia. The diagnosis of AS was ruled out by the absence of any elements of the dartos fascia underneath the skin layer. Congenital perineal lipoma is extremely rare. There are 30 cases reported and to our knowledge this is the first case prenatally diagnosed.

These lesions are typically soft lobulated subcutaneous masses, round or pedunculated.