Objectives: pregnancy outcomes in hypothyroidism associated to diabetes mellitus (DM)

Methods and materials: retrospective analysis of 4 groups: A-hypothyroidism and DM(10), B-overt DM(100), C-hypothyroidism(30), D-control(100); monitored by obstetricians, endocrinologists (TSH, fT4, TPO-Antibody, levothyroxine therapy), nutritionists, neonatologists.

Results. Patients characteristics: age (28.02 ± 4.49/29.20 ± 5.60/27.97 ± 4.74/27.33 ± 4.54), preconceptional weight(67.53 ± 13.73/58.59 ± 9.27/58 ± 8.11/55.32 ± 7.39), Primary parameters: gestational age(35.09± 3.05/36.85 ±2.71/38.27±1.61/37.8 ± 2.21), birthweight(3,541± 625/3,411± 825/3,227 ± 556/3,110 ± 599.9g), Apgar score (7.48 ± 2.49/ 8.45 ± 1.53/8.77 ± 1.11/8.36 ± 1.59); labor induction (2 - 20%/9 -10.47%/ 12 -13%/15 -15%), Atypical/Abnormal CTG: 6/9/6/5), congenital malformations (heart: 1/3/0/0; talus valgus/varus: 6-B; hydrocele: 5-B); neonatal morbidity(RDS: 1-A;7-B; Bronchopulmonary dysplasia: 2-B; Necrositing enterocolitis:1- A, 2- B); Perinatal mortality: Stillbirth:1/4/1/0; Neonatal deaths:1/5/0/4.

Cesarean section (CS) was significant more frequent when associated pathologies (p<0.01): 8 - 80%/50 - 58%/35.4%/ 18- 19%.

Specific maternal morbidity: Weight Gain: 16.77 ± 5.71/18.45 ± 5.61/15.51± 8.92/11.95 ±4.75kg; Gestational Hypertension/Pre-eclampsia:3-30%/9-10.7%/3-10%/10%; DM alteration: 3-30%/2- 2.3%/0/0; no hyperthyroidism. Admissions for preterm birth: 5 -50%/30 -35.4%/ 10 -33%/18%

Conclusions: incidence of hypothyroidism associated to DM lower than that of each disorder (10 cases/4,211 deliveries), maternal age and birthweight higher(p< 0.01), more prematurity, Apgar score reduction (p< 0.01); more labor induction, CS; increased perinatal morbidity, mortality, maternal/neonatal admission; higher maternal weight gain, gestational hypertension, metabolic disorders, no hyperthyroidism