

P195. Metformin improves the obstetrical outcome of women with gestational diabetes

M Neagu (RO) [1], A Busan (RO) [2], E Nada (RO) [3], C Neagu (RO) [4]

Introduction: Gestational diabetes is defined as first-time hyperglycemia in pregnancy. It expands both the mother and the fetus to the further development of a type II diabetes mellitus. Metformin is a biguanide that is given to obese patients with type II diabetes and normal renal function, as well as in certain PCOS phenotypes.

Objective: We analysed the prognosis of patients with gestational diabetes who benefited from metformin and dietary changes over those who had only diet regimen.

Materials and methods: We selected a series of 30 patients diagnosed with gestational diabetes between 22 and 32 weeks. We divided them into two groups, group A - 12 patients and group B - 18 patients. Both groups had the same diet regimen: three main meals free of complex carbohydrates and two fruit snacks. At each meal the protein ratio was 1/3 and the vegetable 2/3. In group A, Metformin was given between 1500-2500 mg per day in 3 outlets.

Pregnancy monitoring was performed by weight monitoring, blood pressure, fasting glucose blood test and 1 hour postprandial twice a week, and biometric fetal ultrasound every two weeks.

Results: All patients in group A had fasting blood sugar levels <90mg/dl and <140mg/dl at one hour postprandial, the weight gain was normal, the fetuses showed no signs of macrosomia, the HC/AC ratio being over 1 and there were no neonatal or maternal complications in the postpartum period. Birth was both vaginal delivery and by caesarean section, the birth weight being between 3500-3800g. Women from group B had unsatisfactory blood glucose control, excessive weight gain, and gave birth to macrosoms.

Conclusions: The use of Metformin combined with diet improved in our case series maternal and fetal prognosis in pregnancies complicated with gestational diabetes.

[1] UMF Carol Davila Bucharest, [2] SCOG Panait Sarbu Bucharest, [3] SCOG Panait Sarbu Bucharest, [4] SCOG Panait Sarbu Bucharest