

24. OBESITY DURING PREGNANCY

Author: Marian Andriana

Scientific adviser: Iurie Donduc, PhD, Associate Professor, Discipline of obstetrics and gynecology, Department of Obstetrics and Gynecology, *Nicolae Testemitanu* State University of Medicine and Pharmacy of the Republic of Moldova.

Introduction. Obesity in women of reproductive age is on the rise, being associated with lower perinatal outcomes, obstetric difficulties, and longer-term care for the mother and newborn. In parturients with an abnormal mass index, there are complications in all periods of birth, starting with labour and ending with the period of childbirth. Obesity influences the condition of the newborn, especially weight and the Apgar score.

Aim of study. To determine the influence of pregestational maternal body mass index on obstetric outcome success.

Methods and materials. We retrospectively studied 280 medical records, which we divided according to body mass index. The control group of 140 women with pre-gestational normal weight (BMI = 18,5-24,9 kg/m²) and the research group of 140 obese women (BMI = 30 kg/m² or greater). Both groups were statistically analysed regarding maternal age, term of gestation at birth, type of birth, newborn mass, Apgar score and number of days in the hospital.

Results. The average age of women with obesity was 34 years, including the patients between 21-40 years, compared with the average age of normal weight women 29 years, (19-37 years). The average term of gestation/ pregnancy at the time of birth in obese patients was 39,2 weeks (28-42weeks), but in women with normal body mass index the average was 38,2 weeks (34-41 weeks), p=0,06. The study showed us a significant difference between types of birth. The rate of cesarean section was higher in obese women. In obese women the birth ended physiologically in 83 (59,28%) cases, while in 43 (30,71%) cases the birth took place by cesarean section, the pneumatic birth was in 14 (10%) cases. In normal-weight women, physiological birth without any complications occurred in 109 (77,85%) cases, cesarean section was performed in 24 (17,14%) women, and pneumatic birth occurred in 7 (5%) cases. The newborn weight from obese mother was 3645 ± 314 grams, but the weight from non-obese mother was 3210 ± 242 grams. The mean of Apgar score in the first and fifth minute of life was 7/8 for children with obese mother and 8/9 for children with non-obese mothers. Women with abnormal body mass index were in hospital 1.5 days longer than women with normal weight p=0,03.

Conclusion. Although the results of the study did not show major differences in the condition of newborns regardless of the mother's weight. Women with high body mass index require more medical attention, especially in time of labour and postpartum supervision.