

16. INCIDENCE AND STRUCTURE OF PERINATAL MORTALITY IN PREGNANCIES > 41 WEEKS

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Introduction. Prolonged pregnancy (PP) is one that lasts more than 42 weeks (294 days) and is associated with an increased incidence of perinatal mortality and morbidity. The leading causes of high mortality in PP are fetal postmaturity syndrome, when a growth-restricted fetus remains in the uterus after term, and macrosomia, which increases the likelihood of abnormal labour and birth trauma.

Aim of study. To analyse the incidence and causes of perinatal mortality in pregnancies > 41 weeks and the role of labour induction in prevention of perinatal mortality.

Methods and materials. Using information from births registers, we compared perinatal outcomes in pregnancies at > 41 weeks and at 37-41 weeks of gestation, as well as neonatal deaths associated with labour induction among 30,212 births occurred between 2011 and 2021 years in the Obstetrical Department No. 1 of Municipal Clinical Hospital "Gh. Paladi". Relative risk and statistical significance (confidence interval (CI) and p-value) were calculated using the MedCalc statistical software.

Results. From the total number of births, 3414 were at > 41 weeks of gestation (11.3%) and 25,287 (83.9%) - at 37- 41 weeks. Perinatal mortality after 41 weeks was 4.4 ‰ (15 out 3412 births) versus 2.6 ‰ at 37-41 weeks (66 out of 25,287 births) - a non-statistically significant difference: RR = 1.68 (95% CI, 0.95 - 2.93, P = 0.07). At the same time, we determined a statistically significant, two-fold increase of antenatal mortality at > 41 weeks (3.2 ‰ (11 deaths in 3412 births)) compared to 37-41 weeks (1.6 ‰ (41 in 25,287)), RR = 1.98, 95% IC, 1.01 - 3.85, P = 0.04). Only 2 (18.2%) of the antepartum deaths were registered in fetuses with growth restriction; 4 newborns (36.2%) had a birth weight > 4000 gr. The most common cause of antenatal deaths was umbilical cord abnormality (7 out of 11, 63.5%). Early neonatal mortality did not differ between groups: 1.17 ‰ (4 deaths in 3410 live births) at > 41 weeks versus 0.98 ‰ (25/25272) at 37-41 weeks: RR = 1.18, 95% CI, 0.41 - 3.39, P = 0.75. Two of these 4 deaths were caused by birth defects and one - by shoulder dystocia; only one death occurred in an induced labor.

Conclusion. Pregnancies at > 41 weeks are associated with a substantial increase in the risk of antenatal mortality compared to term pregnancies at 37-41 weeks. The risk of antepartum death is difficult to predict, as most of the stillbirth occurred in appropriate and large gestational age fetuses and not in those with growth restriction. Induction of labor at 41 week gestation would prevent most of these deaths.