Foetal Mortality in Singleton Foetuses at and beyond Term – An Analysis of German Perinatal Data 2004–2013


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Background: Fetal mortality appears to increase in postmature pregnancies. There is debate on when to induce labour, or to continue watchful waiting. Literature on retrospective analyses of secondary data is inconclusive. Different approaches to calculate fetal risk exist. Recent and relevant data is needed in order to lead an appropriate discussion.

Material and methods: Mortality in singleton fetuses in Germany, between 2004 and 2013 is analyzed in relation to gestational age. Risk for fetal death is described comparing stillbirths per 1000 births at a particular gestational age (GA) versus stillbirths per 1000 ongoing pregnancies (“fetus-at-risk” model). Access to German routine perinatal data was granted. We included all stillbirths in singleton fetuses with no malformations after 36 + 6 gestational age from 2004 until 2013.

Results: 5,933,117 births fulfilled inclusion criteria. Fetal mortality per 1000 births during that week of pregnancy is lowest between 41 + 0 and 41 + 6 days of (0,7/1000). Mortality then increases to 2,3/1000 in 42 + 0 to 42 + 6 GA. With the “fetus-at-risk” model, mortality is low between 37 + 0 and 39 + 6 GA, ranging at 0,2/1000 ongoing pregnancies, increasing to 0,6/1000 between 41 + 0 and 41 + 6, and 2,3/1000 in the following week. For pregnancies lasting longer than 42 + 6, the stillbirth risk is identical at 6,3/1000 with both calculation methods.

Conclusion: Fetal mortality is low until 41 + 6 weeks of pregnancy. Interpretation of current data does not support a policy of routine IOL before this gestational age in singleton fetuses.