A comparative analysis of estimated fetal weight and birthweight

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Objective
To compare the estimated fetal weight based on the external measurements, ultrasound measurements with the apparent weight of the newborn.

Methods
We performed a retrospective analysis of 200 pregnancies in the years 2016-2017 in the Maternity Hospital in Penza. The data analyzed in the study included an estimated fetal weight based on the external measurement of the maternal abdomen, estimated fetal weight based on the ultrasound measurements and the birthweight.

Results
The average value of weights based on the external measurements, ultrasound data and postnatal measurements in the year 2016 were 3720g (+-150), 3550g (+-150), 3600g (+-150) respectively. The average value of weights based on the external measurements, ultrasound data and postnatal measurements in the year 2017 were 3870g (+-150), 3300g (+-150), 3460 (+-150) respectively.

Conclusion
The discrepancy between the estimated fetal weight and birthweight can be explained by the presence of obesity of various degrees and subjectivity of external measurements. Ultrasound measurements are more accurate and correspond better with the weight assessed postnatally. Therefore, ultrasound-based estimation of fetal weight should become a routine practice that allows correct planning of delivery.