

Fetal macrosomia screening may be limited in ability to predict associated perinatal complications

Delivering a newborn with macrosomia (weighing more than 8 pounds, 13 ounces at birth) may be associated with higher risk of adverse outcomes, including perinatal death and injuries related to traumatic delivery, such as shoulder dystocia. A study in *PLOS Medicine* by Gordon Smith at University of Cambridge and colleagues suggests that third trimester fetal macrosomia screening had a clinically insignificant effect on predicting shoulder dystocia.

The diagnostic effectiveness of screening for macrosomia in predicting the delivery of a macrosomic infant, shoulder dystocia and associated neonatal morbidity is not well established. To better understand the relationship between estimated fetal weight, (EFW) macrosomia, and perinatal complications, researchers systematically reviewed the literature from four different clinical databases. The authors then analysed 41 studies involving 112,034 non-high risk patients who had undergone a third trimester ultrasound screening as part of universal screening.

The authors found that a third trimester ultrasonic EFW showing increased risk of a large baby reliably predicted delivery of a macrosomic infant. However, a larger EFW was not strongly associated with the risk of shoulder dystocia in low and medium-risk pregnancies. The study was limited by the reviewed studies' inconsistent ability to predict a macrosomic infant. However, the lack of evidence showing that large estimated fetal weight is positively associated with complications like shoulder dystocia may demonstrate the limited efficacy of third trimester macrosomia screening.

According to the authors, "We recommend caution prior to introducing universal third trimester screening for macrosomia as it would increase the rates of intervention, with potential iatrogenic harm, without clear evidence that it would reduce neonatal morbidity".

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