

Ultrasound screening may be limited in ability to predict perinatal complications

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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 stuck shoulders (shoulder dystocia). A study in *PLOS Medicine* by Gordon Smith at the University of Cambridge and colleagues suggests that third trimester fetal ultrasound screening has the ability to identify more pregnancies with macrosomia.

The diagnostic effectiveness of ultrasound [screening](#) 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 analyzed 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 variation in included studies representing differences in screening in various countries.

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."

More information: Alexandros A. Moraitis et al. Universal third-trimester ultrasonic screening using fetal macrosomia in the prediction of adverse perinatal outcome: A systematic review and meta-analysis of diagnostic test accuracy, *PLOS Medicine* (2020). [DOI: 10.1371/journal.pmed.1003190](https://doi.org/10.1371/journal.pmed.1003190)

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