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Press release

Foetal growth restriction (FGR): assessment and impact of screening

An observational study carried out in France by Jennifer Zeitlin and her team (Inserm Unit 1153, Obstetrical, Perinatal, and Pediatric Epidemiology Research Team, EPOPé), on over 14,000 women, shows that only 21% of infants with foetal growth restriction (FGR) had been suspected of having FGR during pregnancy, despite national recommendations that invite women to have an ultrasound scan during the third trimester of pregnancy. The study shows that nearly half of the infants with suspected FGR were of normal weight at birth (false positives). Moreover, suspected FGR during pregnancy was associated with an increased risk of planned pre-labour caesarean delivery or induced labour, independent of the existence or otherwise of low birthweight. The results of this study, published in [*BJOG: An International Journal of Obstetrics and Gynaecology*](#), emphasise the need to reflect on the reasons for the poor performance of FGR screening, and also raise questions about the potential iatrogenic effects of screening on the false positives.

Foetal growth restriction (FGR) is an obstetric pathology that causes considerable perinatal morbidity and death. It appears as a change in foetal growth that can be detected during pregnancy, mainly by estimating foetal weight from ultrasound measurements. In France, the third trimester ultrasound recommended for all pregnant women serves to monitor foetal growth and identify foetuses with FGR. Antenatal detection of FGR enables monitoring of the pregnancy to be adapted to prevent risks of foetal and neonatal death, as well as risks of neurological sequelae for the infant.

Few studies to date had assessed the performance and impact of FGR screening on the general population. **The aim of the researchers was to estimate the percentage of infants for whom FGR had been suspected antenatally, and to measure the effect of this suspicion on medical decision-making, by analysing a representative sample of births in France in 2010.** To do this, they estimated the number of low birthweight (below the 10th percentile for gestational age) infants born and, of these, the proportion of infants who had been suspected of having FGR antenatally.

The study showed that only 21% of low birthweight infants had been suspected of having

FGR during pregnancy. Furthermore, half of the infants suspected of having FGR during pregnancy were of normal birthweight (\geq 10th percentile). Antenatal suspicion of FGR was associated with an increased probability of having a planned pre-labour caesarean delivery or an induced labour, independent of the existence or otherwise of low birthweight. Similar results were obtained for the subgroup of women who showed no complications during pregnancy.

For Jennifer Zeitlin and her team, *“The results of this study emphasise the need for a reflection on the reasons for the poor performance of FGR screening in France. They also raise questions about risks from carrying out unnecessary medical interventions, where suspected FGR during pregnancy has not been confirmed at birth.”*

Sources

« Poor effectiveness of antenatal detection of fetal growth restriction and consequences for obstetric management and neonatal outcomes: a French national study »

Monier I, Blondel B, Ego A, Kaminski M, Goffinet F, Zeitlin

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