

Birthweight and scan findings in pregnancies with term pre-eclampsia

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INTRODUCTION

- Term PE is a major cause of maternal & perinatal morbidity/mortality
- Prevention strategies have limited effectiveness
- If PE ≥ 37 weeks $\rightarrow$ expedite birth
- **Role of US $\rightarrow$ widely used, but its predictive value for perinatal outcomes is unclear**

MATERIALS AND METHODS

- Retrospective cohort study
- Singletons pregnancies delivering at term
- **41571 pregnancies, 1738 (4.2%) had PE**
- Abnormal final scan if EFW $< 10^{\text{th}}$ c or CPR $< 5^{\text{th}}$ c
- **Outcomes: stillbirth (SB), neonatal adverse outcomes (CAO1 and CAO2)*, time and mode of birth**

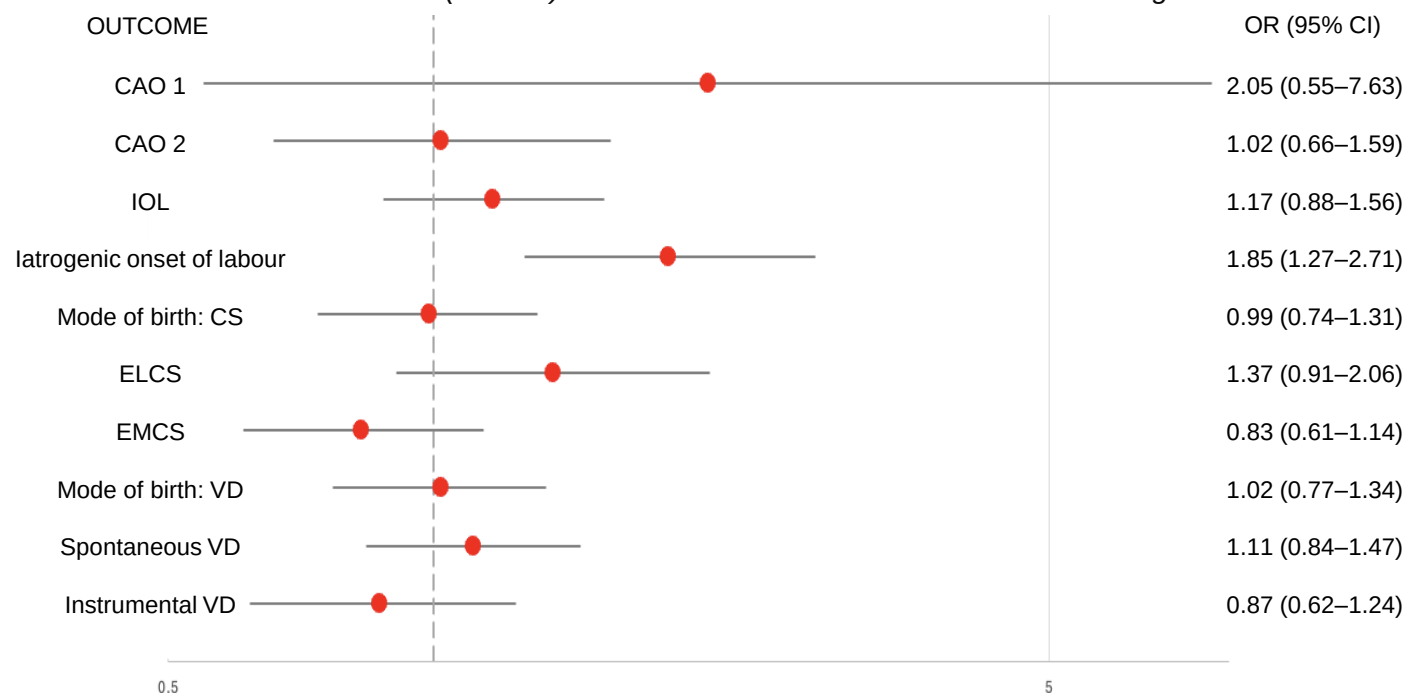
RESULTS

Key findings:

- PE is associated with higher rates of SB, CAO2 and iatrogenic birth
- However only 14% of PE pregnancies had an 'abnormal' final scan
- Abnormal scan findings had **low sensitivity for adverse outcomes** (CAO1 25%, CAO2 14%)
- **Low CPR and LGA, but not SGA, were associated with increased adverse neonatal outcomes**

Outcomes in PE pregnancies according to final ultrasound findings

Odds ratios (95% CI) for abnormal vs normal final ultrasound findings



CAO 1 = need of therapeutic cooling, invasive ventilation for at least 24h, hypoxic ischemic encephalopathy grade 2-3, neonatal seizures, neonatal death, arterial cord pH < 7 ;
CAO 2 = any element of CAO 1 or either Apgar < 7 at 5 minutes or neonatal unit admission > 24 h; IOL = induction of labour; iatrogenic onset of labour = induction of labour or pre-labour C section; ELCS = elective C section; EMCS = emergency C section; VD = vaginal delivery

Conclusions

Most pregnancies with term PE have a normal birthweight and a normal third trimester scan.

No scan parameter predicts adverse outcomes well.

PE at term should prompt birth irrespective of scan findings.