Trial of induction of labour to prevent shoulder dystocia

Eligibility

LGA >90th GROW centile

at scan-estimated fetal weight between 35+0 and 38+0 weeks

Recruited

2893 women

106 NHS hospitals

Randomised to

Induction between 38+0 to 38+4 weeks

Standard care

Expected difference: 10.5 days, 300g

Intention to Treat Analysis

1 in 4 women in standard care arm were delivered during induction arm period

Difference between arms: 6 days, 163g

No significant reduction in shoulder dystocia: RR 0.75, 95% CI 0.51-1.09

Per Protocol Analysis

38% reduction in SDs

Excluded all deliveries ≤38+4 in standard care arm

Average gestational age: 38+4 (induction) and 39+5 (control)

Difference between arms: 8 days, 213g

Significant reduction in shoulder dystocia: RR 0.62, 95% CI 0.41-0.92

Mothers in induction arm had

- Fewer elective and emergency c-sections
- Reduced rate of postpartum haemorrhage
- No increase in 3rd or 4th degree tears
- Longer hospital stay by 0.4 days

Babies in induction arm had

- No difference in brachial plexus injuries
- No fractures (in either arm of the trial)
- No increased need for phototherapy
- No difference in other secondary outcomes

LGA at scan predicting LGA at birth

42% of babies in induction arm and 40% in standard care arm had LGA birthweight

Information to consider for management plan

history | **clinical assessment** | **maternal expectations and preferences**

Options for shared decision making

1. Expectant management

- wait and observe
- scans are estimates only
- trust delivery team to be well trained

2. Elective caesarean section

- eliminates risk of shoulder dystocia
- increased postpartum haemorrhage
- ? plans for subsequent pregnancies

3. Induction of labour

- reduces risk of shoulder dystocia
- reduces need for caesarean section
- no increase in 3rd or 4th degree tears
- no adverse effect on neonate
- longer hospital stay by 0.4 days

perinatal institute

Erbs Palsy Group

WARWICK CLINICAL TRIALS UNIT

NIHR | National Institute for Health and Care Research

NHS University Hospitals Coventry and Warwickshire NHS Trust

Scan here to read the full study in The Lancet