

Decreased Foetal Movements at Term – Investigations and Outcomes from Induction of Labour

Dr C Clarke¹, Dr V Malarazhagan

1. Gold Coast Hospital and Health Service

Introduction

A change in foetal movements is a common cause of presentation to maternity centres across Australia and New Zealand. Recommended measurements of foetal wellbeing include performing CTG, ultrasonography and the Kleihauer test¹. Maternal recognition of reduced foetal movements (RFM) has been associated with increased risk of stillbirth². With an aim to reduce stillbirth incidence, women with term pregnancies may be offered an induction of labour (IOL) when presenting with RFM. Prioritising resources and IOL timing can be a difficult for clinicians.

Aim

RANZCOG has a recommended list of investigations for RFM, including the Safer Baby Bundle, however in term pregnancies these may not be performed prior to recommending delivery. The aim of this audit was to investigate the incidence of investigations (CTG, ultrasound, Kleihauer), outcome of IOL, mode of delivery and timing from investigations to delivery.

Methods

Retrospective data was identified for 30 patients who had IOL for RFM over a period of three months, with gestational age at presentation ranging from 37+0 to 41+7. Women with pre-existing identified risk factors for stillbirth were excluded.

Results

Of the 30 identified women, 17 were primiparous and 13 multiparous. All women presenting to the Maternity Assessment Centre received a CTG. A Kleihauer test was performed in 23 cases. Only one resulted in a positive test.

No. of presentations of RFM	No. of Kleihauer tests performed
First presentation	17
Second presentation	4
Third presentation	2

Ultrasound was performed in 17 cases (including within two week of presentation) Of these, 14 had documented normal findings. 13 patients had no ultrasound prior to IOL.

Gestational age at time of IOL	
37+0 – 37+6	5
38+0 – 38+6	8
39+0 – 39+6	8
>40+0	9

Discussion

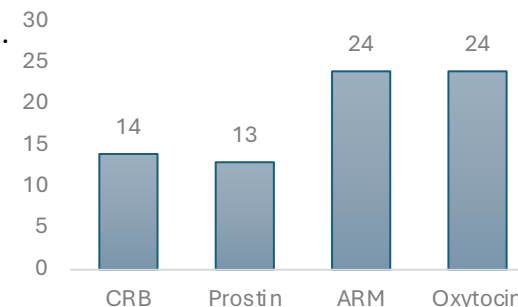
The majority of IOL at term for RFM resulted in vaginal birth (67% spontaneous, 13% assisted). Neonatal outcomes were positive, with only three admissions to SCN/NICU. One delivery was complicated by shoulder dystocia and there were five documented post-partum haemorrhages >500ml. 21 of the 30 women had a discussion with an obstetric registrar regarding IOL prior to commencing.

Recommendations from RANZCOG and state-based guidelines regarding investigations for RFM, particularly at term, are highly dependent on clinician assessment and identified risk factors for stillbirth. In the identified data, not all women received these investigations, particularly if post-dates, where delivery was recommended rather than waiting for investigations or spontaneous labour. Utilisation and access to resources should also be considered, as not all centres will have pathology or ultrasound availability on demand.

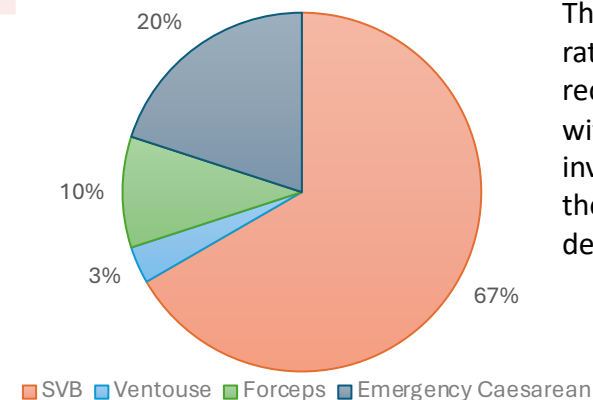
References

1. Perinatal Society of Australia and New Zealand and Centre of Research Excellence Stillbirth. *Clinical practice guideline for the care of women with decreased fetal movements for women with a singleton pregnancy from 28 weeks' gestation*. Centre of Research Excellence in Stillbirth. Brisbane, Australia, September 2019.
2. 1. Heazell AE, Frøen JF. Methods of fetal movement counting and the detection of fetal compromise. *Journal of Obstetrics and Gynaecology*. 2008 Jan;28(2):147–54. doi:10.1080/01443610801912618

Method of Induction



Mode of Delivery



Further research into outcomes of IOL for RFM at early term (37+0 to 38+6) is suggested. The ongoing difficulty of reducing stillbirth rates is likely a contributing factor to the recommendation for delivery when presenting with RFM at term, even with normal investigations. Discussions with women and their partners and involving them in shared decision making remains critically important.