Audit of Compliance to Local, National and International Protocol for Presentations of Reduced Fetal Movements to a Tertiary Maternity Unit in Western Australia

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Introduction

- Decreased fetal movements (DFM) have been a recognised risk factor for stillbirth since the 1970's. Despite this, optimum management of DFM is uncertain, and heterogeneity exists between guidelines.
- An audit was undertaken to assess the presentation and management of DFM presentations from 20 weeks gestation to the MFAU at a tertiary referral centre in Western Australia – Fiona Stanley Hospital.
- Local and international guidelines used as benchmarks for comparison include:
 - PSANZ Clinical Practice Guidelines
 - RCOG Green Top Guidelines
 - King Edward Memorial Hospital Guidelines

Methods

- 729 presentations for DFM to FSH MFAU between 1/10/2021 and 31/3/2022.
- Random number generator used to establish a sample population of 48 patients with 50 presentations total.
- Outcomes obtained from patient digital medical records: parity, gestational age, risk factors identified, abdominal palpation, SFH, normal CTG documented, USS performed, Kleihauer performed, case d/w senior, presentation number, and outcome.

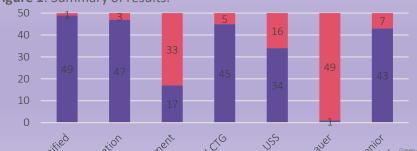




Results

- 33% of women were nulliparous and 67% were multiparous. The average gestational age at presentation was 36.6 weeks.
- While abdominal palpation was performed 94% of the time, SFH measurement was performed in only 34% of presentations.
- All 43 presentations with a gestational age above 28 weeks had a CTG performed with every CTG documented as normal. Of the 5 patients who did not receive a CTG, all were below 28 weeks gestation and a fetal heart rate was obtained in all.
- An USS was performed in 68% of presentations -28% having a bedside USS only and 40% having either a formal USS performed or booked to be completed (figure 2).
- 64% were discharged home with routine follow-up, 8% had close outpatient monitoring, and 4% of patients were admitted as an inpatient for monitoring (figure 3). 24% had delivery planned with either an IOL or caesarean section.
- From 39 weeks gestation, 90% were booked for delivery. From 37 weeks gestation, 58% were booked for delivery

Figure 1: Summary of results.



Discussion

- DFM are a recognised risk factor for stillbirth although there is still considerable variation in the assessment and management for DFM. This variation persists both between and within individual institutions, as well as in clinical practice guidelines. Overall our compliance with CTG, as well as utilising at least one method for fetal growth assessment, was high.
- While DFM from 39 weeks gestation had a high rate of delivery, judicious use of early term delivery is indicated on a case by case basis.

Figure 2: Ultrasound assessment for DFM



- Not Performed Bedside USS Formal USS
- Figure 3: Disposition following presentation for DFM



