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Audit of Primigravida Caesarean Sections in a Western Australian Tertiary Centre

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FIONA STANLEY hospital

Introduction

Fiona Stanley Hospital established in 2015 as Western Australia's second tertiary maternity unit. Initial indicators, particularly Caesarean section rates, demonstrated non-compliance with Australian Clinical Healthcare Standards. Caesarean section for a woman's mode of first delivery has significant potential for maternal and fetal morbidity and expense for healthcare systems.

Aim

To analyse contributing factors that may be addressed to improve management.

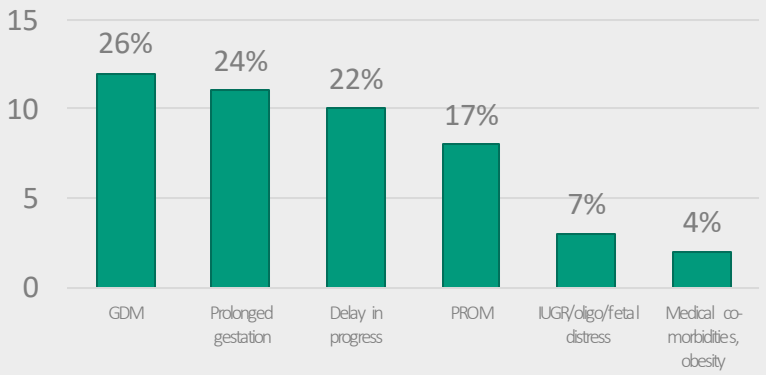
Methods

A retrospective audit was conducted of all primigravid women aged between 18-40 who underwent a Caesarean section between January and March 2018. Those who had non-vertex presentations, multiple pregnancies and fetal death in utero were excluded. Further analysis was conducted on a subgroup of 53 women with failure to progress as the main indication. Data was extracted from medical records with respect to patient characteristics, intrapartum events as well as maternal and fetal outcomes.

Results

Of the total 121 women, 18% (n = 22) delivered electively while 82% (n = 99) had an emergency Caesarean section. In 28% of women the onset of labour was spontaneous, while 72% were induced or augmented. The main indications were failure to progress (41%), non-reassuring fetal status (34%), abnormal lie (21%) and unsuccessful induction of labour (4%). Of the 53 women who underwent a Caesarean section for failure to progress. 47% (n = 25) were obese or morbidly obese (BMI >30) and 87% (n= 53) were induced or augmented. By far, the most common complication was postpartum haemorrhage.

Figure 1. Indications for induction/augmentation



Discussion

Fiona Stanley Hospital sees a large proportion of high risk parturients with significant comorbidities. Management of labour in these women is nuanced and is additionally limited by infrastructure, staffing, and access to other subspecialty expertise.

Most Caesarean sections were performed in the emergency setting, of which the most common indication is failure to progress. In this cohort, all, bar one, were in the first stage of labour, which suggests excellent management of the second stage.

This study identifies induction and augmentation of labour as the main area where clinical practice can be modified to reduce primigravida Caesarean section rates. This study is limited by its retrospective nature, small sample size and lack of documentation.

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