

# The Ten groups of Robson Classification to Assess Uterine Rupture. Is it Useful?

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#### Introduction

Quality assurance in labour and delivery is needed. The method must be simple, consistent and of universal value. The 10 groups of the Robson Classification (TGCS), proposed in 2001, is a system that allows for measurement and comparison of all perinatal events and outcomes. It classifies women in labor, based on their obstetric characteristics (parity, previous caesarean section, gestational age, fetal presentation and number of fetuses) [1]. The system allows that every woman admitted for delivery to be immediately classified into one of these groups. Since then this classification has been widely used in many countries [2] and in 2011, WHO has endorsed its implementation as a global standard for assessing, monitoring and comparing cesarean rates within health care facilities over time and between other facilities. The results of the implementation have been considered a satisfying procedure, allowing protocols to be systematically reviewed, so that the indications of cesarean sections are the most adequate which reflected in the reduction of caesarean section rates and on the improvement of the quality of the assistance to women in delivery wards. [3,4]. Can the same systematic approach be used to measure, quantify and reduce other worse adverse outcomes that are more prevalent in developing countries such as uterine rupture which usually results in severe perinatal and maternal morbidity and mortality (maternal and fetal mortality, bladder rupture, vesicovaginal and recto-vaginal fistulas, physiological trauma)? [5,6]. That's an intriguing question. We therefore propose the use of the TGCS in developing countries so that it can be used to analyze all labor events and outcomes [7] including measure, quantify and reduce the incidence of uterine rupture.

#### Discussion

The Robson classification in 2001 was based on the premise that all information (epidemiological, maternal and fetal events, outcomes, cost and organizational), will be more clinically relevant by stratifying them using the ten groups. A literature search through major platforms Pubmed and Medline using appropriate Key Words (Ten Groups Classification of Robson; Uterine Rupture, Maternal Mortality) did not revealed any publications that attempted to use The Robson classification to reduce the risk of uterine rupture. Uterine rupture is a huge perinatal obstetric problem in our setting [6]. We have conducted an audit on the incidence of uterine rupture in the Lucrécia Paím Maternal Hospital in Luanda using the Ten Groups classification of Robson from the 1<sup>st</sup> January to 31<sup>st</sup> December 2015. Out of 20.075 deliveries, 250 cases of uterine rupture were recorded making an incidence of 1:108. For convenience sampling 100 cases were selected randomly and the authors found that 40 % of cases were in group 5 (Women with previous CS, singleton, cephalic,  $\geq$ 37 weeks' gestation); 23% in group 4 (Multiparous (excluding previous caesareans), singleton, cephalic,  $\geq$ 37 weeks' gestation, induced or caesarean before labor); 13% were in group 2 (Nulliparous, singleton, cephalic,  $\geq$ 37 weeks' gestation, induced or caesarean before labor). For the

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remaining groups, there was a low frequency of cases. The study concluded that the Ten Groups Classification of Robson helped to better frame the occurrence of uterine rupture in the study [8].

#### Conclusion

This is eventually a turning point for the use of the Ten Groups Classification for events other than caesarean section rates, especially for conditions that threaten maternal and fetal life in developing countries. More studies are needed to confirm that.

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197