A Simple Guide to Lowering Cesarean Rates in Samarkand Maternity Hospitals With Robson's Classification

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ABSTRACT

In the present article, all cases delivered by cesarean section during the period of six months were recorded and classified according to Robson's 10 group classification system. This was an attempt to see which clinically relevant groups contributed most to the cesarean deliveries.

Keywords:	Robson's classification, treatment, method, medicine.

INTRODUCTION

As advised by WHO guidelines and US Healthy initiative2000, the cesarean section rate should not be beyond 15 %. However, there was an upward trend of cesareansection rate as there were no reliable and internationally standardised data enabling a global comparison for the indications of cesarean sections[1].

MATERIALS AND METHODS

We made an attempt to classify the caesarean section based on this system to address the cause of rising caesarean section in our scenario. The objectives of the study were:

- To classify the cesarean section according to theircauses.
- To identify and audit the rising causes of cesareansection in our scenario.
- To standardise the indications of cesarean section.

Table 1: Robson's classification of cesarean section

Groups	Clinical characteristics
1	Nulliparous, singleton, cephalic, ≥37 weeks,spontaneous labor
2	Nulliparous, singleton, cephalic, ≥37 weeks,induced labor or cesarean section before labor
3	Multiparous without previous cesarean section, singleton, cephalic, ≥37 weeks, spontaneous labor
4	Multiparous without previous cesarean section, singleton, cephalic, ≥37 weeks, induced labor or caesarean section beforelabor

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[1] WHO Statement on Cesarean Section Rates; WHO/RHR/15.02. Available at http://www.who.int/reproductivehealth/publications/maternal_perinatal_heal th/cs-statement/en/.

5	Multiparous with prior cesarean section,singleton, cephalic, ≥37 weeks
6	All nulliparous breeches
7	All multiparous breeches (includingprevious cesarean section)
8	All multiple pregnancies (includingprevious cesarean section)
9	All pregnancies with transverse or obliquelie (including those previous cesarean section)
10	Singleton, cephalic, ≤36 weeks (includingprevious cesarean section)

RESULTS AND DISCUSSION

The present study was carried out retrospectively over a period of six months from October'17 to March'18 in the department of Obstetrics and Gynecology. All data was retrieved and entered in a preformed structured performa[2].

• Patients delivered by caesarean section during the given period (October'17 to March'18) were recorded and classified according to Robson's 10 group classification system as given in Table 1.

The parameters considered were according to the classification system

• Parity (with/ without previous CS);
• Gestational age (>37/<36 weeks),
• Fetal presentation (cephalic/ breech / abnormal lie)
• Number of fetuses (singleton/ multiple)
• Onset of labour (spontaneous/ induced / prelabourCS). (Table I)

Exclusion criteria

• Term normal or instrumental vaginally delivered patients.
• Preterm normal or instrumental vaginally deliveredpatients.

Data collected was analysed using simple statistical measures like percentage and proportion. Descriptive statistical analysis was done. The study was conducted after taking approval from institutional ethical committee.

There was a trend of increased percentage of cesarean section in group 5 (multiparous with prior cesarean section, singleton, cephalic, ≥37 weeks) and 2 (nulliparous, singleton, cephalic, ≥37 weeks, induced labor or cesarean section before labor) which was 36 and

36.71 percent respectively. Induction of labour increased the chances of caesarean section.

The caesarean section rate in group 1 (nulliparous, singleton, cephalic, ≥37 weeks, spontaneous labor) (18.4%) and 3 (multiparous without previous cesarean section, singleton, cephalic, ≥37 weeks, spontaneous labor) (5.76%) was less as they came in spontaneous labour as compared with group 2 (nulliparous, singleton,cephalic, ≥37 weeks, induced labor or cesarean section before labor) (69.53%) and 4 (multiparous without previous cesarean section, singleton, cephalic, ≥37 weeks, induced labor or caesarean section before labor) (22.58%) respectively where the labour was induced. There was an increased contribution of cesarean section by group 5(multiparous with prior cesarean section, singleton,cephalic, ≥37 weeks) and 2 (nulliparous, singleton, cephalic, ≥37 weeks, induced labor or cesarean section before labor) which was 36 and 36.71 percent respectively as seen in present study. The rate of caesarean section increases in patients with previous caesarean section (group 5). Although these patients wereoffered trial of labour, yet the rate of refusal by these patients for trial of labour was high.

Standardisation and classification of cesarean deliveries was done for the first time in our department according tothe Robson's criteria. This was an attempt to see which clinically relevant groups contributed most to the cesarean deliveries. As we observed in present study, the rate of cesarean section in our hospital (53.86%) is quite higher than what has

[2] Marshall NE, Fu R, Guise JM. Impact of multiple cesarean deliveries on maternal morbidity: a systematic review. Am J Obstet Gynecol. 2011;205(3):262.e1-8

been considered by WHO (15%). The cesarean section rate depicted in year 2013-2014 in India was 16.4%.[7] This rose to 18% in 2015-16 when a health survey was conducted by Nation Family Health Survey. The average cesarean rate in Asian countries (27.3%) was much lower when compared with USA (31.1%)[3].

Vogel et al analysed the contributions of specific groups through Robson's 10 group classification system in 2 WHO multi- country surveys and concluded the proportion of women with previous caesarean section hasincreased along with the caesarean section rate in these women as we see in present study.[9] Similarly, the use of induction and prelabour caesarean caesarean section andcaesarean section after induction in multiparous has also increased according to them. In present study also group 2 and 4 had an increased caesarean section rate when compared with 1 and 3 respectively.

Hence, the need of the hour is to firstly limit induction of labour. It should be strictly evidence based. Secondly, we should critically evaluate on daily basis the indication of primary caesarean section. This will not only decrease thecaesarean section in nulliparous but will also eventually decrease caesarean section in multiparous with previous caesarean section. The hospital where this study was conducted was a tertiary care centre where there is large number of referred high risk cases. There is an increase in trend of cesarean section on maternal request.

CONCLUSION

Authors should judiciously make use of vaginal birth after cesarean deliveries but not at the cost of maternal or fetal health. Standardization of indication of cesarean deliveries, regular audits and definite protocols in hospital will aid in curbing the cesarean section rate in hospital. This will definitely aid in decreased maternal morbidity associated with cesarean delivery rates, reduce the hospital stay and in turn improve the economy. At the same time, one should make every effort to provide the cesarean delivery to the woman in clinically indicated need rather than to achieve a specific rate.

[3] FIGO Working Group on Challenges in Care of Mothers and Infants during Labour and Delivery,"Best practise advice

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