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The rising rate of cesarean deliveries is a cause for concern. Toward reducing and stabilizing the cesarean delivery rate, various task forces have been formed, awareness is brought about and reams of literature are rolled out. Audits at individual, departmental, institutional, and national levels are conducted to identify the avoidable indications for cesarean deliveries.

Attempts are made to assign indication for cesarean deliveries to one of the four or five categories, that is, previous cesarean, breech, dystocia, fetal distress, and others. Each delivery is assigned to the highest ranked indication noted for that pregnancy regardless of other indications recorded.

Some authors have devised a 10-group classification of cesarean deliveries which would be helpful in finding the contribution of different indications for the cesarean rate and also for comparison of the trends in cesarean deliveries among different study groups, or in the same group during different time periods [Table 1]. Through such an audit, area that needs further scrutiny can be identified and management guidelines can be planned. Several investigators have found application of Robson’s classification in their audit of cesarean deliveries.

Addressing to the issue of repeat cesarean delivery, Lydon-Rochelle et al. conclude that improvements in standardization of indication nomenclature and documentation of indication are especially important for understanding falling rates of vaginal birth after cesarean. Similarly, Wareham et al. opined that structured diagnostic criteria for cesarean section indications were introduced and that the cesarean sections performed in the preceding 24 h were peer reviewed in their setting by the on-call team.

Most of the above-mentioned works are audits and are based on retrospective assignment of indication(s) for cesarean. During auditing the obstetrician actually involved in the management may not always be present to assign the ranking to the indications. Let us take a situation where a woman with previous cesarean and imminent eclampsia has had cesarean and the indication is to be ranked. Cesarean may have been carried out because of imminent eclampsia, but the physician auditing may assign the cause to previous cesarean, if he was not involved in the clinical decision making.

The main indications for cesarean delivery are nonreassuring fetal status, previous cesarean, malpresentation, cephalopelvic disproportion, and nonprogress of labor. For each of these indications, there are many grey areas and that cannot be proven, but can only be presumed or logical attempt is made to explain. It is not uncommon to have multiple problems and factors for cesarean delivery in a case. It is the practice to document all problems under the head indications for cesarean delivery decision. Consider a case scenario where a primigravida with gestational diabetes had a cesarean for nonprogress of labor and nonreassuring fetal status. It would be difficult to find out the main indication for cesarean as one would be in a quandary in identifying the compelling indication as whether it is nonprogress of labor or nonreassuring fetal status, unless he/she goes through the complete case record. The questions that seek answers will be whether nonreassuring fetal status is a manifestation of nonprogress of labor and what the cause for nonprogress is.

Nonreassuring fetal status may be diagnosed based on cardiotocographic traces before or during labor, antenatal Doppler fetal vascular flow studies, or fetal scalp blood evaluation in labor. There are less accurate indicators such as

<table>
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<th>Table 1: The 10-group classification of Robson[3]</th>
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<td>Group</td>
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as meconium stained liquor amnii, oligohydramnios, and decreased fetal movements. In a high-risk pregnancy like one with preeclampsia, even the poor indicators like fetal growth restriction, oligohydramnios are given higher weightage and cesarean delivery is resorted to. Many a times, the factor dictating the decision making is how important the patient or her pregnancy, and ‘nonreassuring fetal status’ is looked for! In case of trial of labor in woman with the previous cesarean, nonreassuring fetal status can mean more. It may be a direct case with nonreassuring fetal status or may be sequel to disturbance in the uterine scar. In such situations, should nonreassuring fetal status be written as the indication for cesarean or uterine scar dehiscence, or both?

Assessing the adequacy of passage (pelvis) for a particular fetus with particular attitude is one of the difficult tasks. It is said that labor in itself is the test for pelvic adequacy. Disproportion can be picked up in labor in several ways. Nonprogress of labor in the form of abnormal uterine action, tardy dilation of cervix and/or fetal descent, or nonreassuring fetal status may in itself be the manifestation of disproportion. On the other hand there are situations such as maternal dehydration, drugs that can cause abnormal uterine action and delay in progress of labor; similarly, there are several other reasons for nonreassuring fetal status. If there is a evidence for disproportion like fairly big-sized baby (as weighed after birth) or deflexed head (as noted at cesarean or by the site of caput succedaneum in newborn), cephalopelvic disproportion as a cause for nonprogress may be true. Thus each situation should be analyzed critically so as to know the actual cause for any abnormality that compelled one to adopt cesarean delivery.

As per the practice guidelines proposed by the specialty organizations, previous cesarean can be the sole direct indication for the cesarean delivery when it is done electively on the basis of evidence suggesting weak uterine scar (previous vertical/inverted ‘T’ incision/2 or more cesareans), at woman’s wish or suspected disproportion. Having left the woman for a trial of labor, the specific reason like suspected scar disturbance or nonreassuring fetal status that compelled cesarean delivery should be written as the indication instead of ‘previous cesarean’. If fetal heart rate abnormalities prove to be due secondary to scar dehiscence as noticed at cesarean, it is better either to revise the indication for delivery or document separately as per the operative findings.

One more aspect to be noted is that the indication for termination of pregnancy need not be the indication for the cesarean delivery. One may have decided to terminate the pregnancy in view of preeclampsia, but cesarean delivery would have been chosen due to abruption, previous cesarean, breech presentation or fetal growth restriction in a particular case. Hence, it is necessary that the indications for both should be clearly mentioned.

### Table 2: Format for documenting indication for caesarean delivery

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<thead>
<tr>
<th>1.</th>
<th>Indication for termination of pregnancy: ________________________________</th>
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<td>2.</td>
<td>Indication for cesarean delivery</td>
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<tr>
<td>(a)</td>
<td>Immediate compelling indication: ____________________________</td>
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<td>(b)</td>
<td>Associated indications (if present, in order of importance)</td>
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<td>(1)</td>
<td>___________________________________________________________________</td>
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<tr>
<td>(2)</td>
<td>___________________________________________________________________</td>
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<tr>
<td>(c)</td>
<td>High risk factors (if present)</td>
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<tr>
<td>(1)</td>
<td>__________________________________________________________________</td>
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<tr>
<td>(2)</td>
<td>__________________________________________________________________</td>
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<tr>
<td>(d)</td>
<td>Peroperative/neonatal finding supporting</td>
</tr>
<tr>
<td>(1)</td>
<td>___________________________________________________________________</td>
</tr>
<tr>
<td>(2)</td>
<td>___________________________________________________________________</td>
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</tbody>
</table>

Similarly in case of placenta previa with malpresentation, the former should be the indication for cesarean. In the absence of other obvious causes, malpresentation would be due to placenta previa.

Keeping all such and many more vagaries in mind, it is suggested that the reason for the termination of pregnancy by cesarean is elaborately documented as shown in Table 2.

This proposed way of documentation is ‘easy-to-edit’ and provides analyzed authentic information to any kind of audit that can be undertaken at any time. It will nullify the built-in bias prevalent in methods that allocate the highest ranked indication to a cesarean delivery. In addition, the obstetrician will be actively involved in reporting the delivery methodically which will indirectly compel one to analyze the decisions made.

### References


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