

Documentation of Operative Vaginal Deliveries

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Background

An operative vaginal delivery is a delivery in which the provider uses forceps, a vacuum, or another device to aid in the extraction of the fetus from the vagina. In some cases, operative vaginal delivery can serve as an alternative to cesarean section when spontaneous vaginal delivery is not possible. Operative vaginal deliveries have a higher mortality than spontaneous vaginal deliveries¹; operative vaginal deliveries also have a high rate of malpractice suits as a result. One strategy to reduce litigation associated with operative vaginal deliveries is detailed documentation of the procedure.¹ The Society for Maternal Fetal Medicine (SMFM) released guidelines for documentation of operative vaginal deliveries² in May 2020. One of the long-term goals of this study is to develop ways to improve documentation and education for physicians on proper documentation of operative vaginal deliveries.

Objective

We aim to identify if physicians are documenting operative vaginal deliveries according to Society for Maternal Fetal Medicine (SMFM) guidelines and to identify the frequency with which each criterion is being documented.

Methods

We will acquire a list of all operative vaginal deliveries attempted and performed at Touro between January 1, 2015, and the present. For each patient, we will fill out a REDCap survey of questions including the date of procedure, type of physician (i.e., resident, attending), and the presence or absence (i.e., yes/no) of different charting criteria.

REDCap Survey

For each operative vaginal delivery, we will record the following general information about each case:

- Date of Procedure
- Documenting Physician (Attending, Fellow, Resident)
 - For Attending
 - fellowship trained?
 - private or academic?
 - For Resident → year of training

Then, we will record information about inclusion/exclusion of the SMFM recommended charting elements:

- Indication for Procedure (e.g., prolonged second stage, fetal compromise, etc.)
- Estimated Fetal Weight Appropriate for Vaginal Delivery
- Cervix Positioning (e.g., fully dilated and retracted)
- Maternal Pelvis Dimensions Adequate for Vaginal Delivery
- Fetal Head Engagement
- Note about Fetal Contraindications (e.g., vWD, OI)
- Station and Position of Fetal Head
- Relevant Past Medical History
- Synopsis of Labor Progress
- Fetal Heart Tracings
- Method of Anesthesia

REDCap Survey (continued)

Finally, specific documentation criteria relating to either vacuum or forceps delivery are recorded:

- Instrument Name / Type
 - E.g., kiwi, bell, Simpson, Elliot
- Clock Time of Instrument (forceps or vacuum) Application
- Clock Time of Instrument (forceps or vacuum) Removal
- Number of Contractions during Instrument Use
- Maximum Negative Pressure Used
- Degree of Effort Used (e.g., easy, moderate, difficult)
- Degree of Rotation or Lack Thereof
- Number of Dislodgements (pop-offs)
- Classification of Forceps Delivery (e.g., outlet, low, midforceps)
- Newborn Marks or Trauma from Instrument
- Number of Pulls Using Instrument
- Complication Presence or Absence
 - Lacerations
 - Hemorrhage
 - Shoulder Dystocia
 - None

Future Directions

- Circumstances or tools that enhanced or deterred proper documentation
- Relationship between SMFM guideline documentation and malpractice suit outcomes in operative vaginal deliveries

References

1. Staat, Barton & Combs, C.. (2020). SMFM Special Statement: Operative vaginal delivery: checklists for performance and documentation. American Journal of Obstetrics and Gynecology. 222. B15-B21. 10.1016/j.ajog.2020.02.011.
2. Counihan, Joshua & Vick, Tara & Temming, Lorene. (2015). Efficacy of Checklists on Proper Documentation of Operative Vaginal Deliveries [132]. Obstetrics and gynecology. 125 Suppl 1. 47S. 10.1097/01.AOG.0000463093.04394.a9.