

## Operative Delivery Patient Selection Criteria and Indications for use of Forceps or Vacuum Extractor in Vertex Presentations

### **Purpose:**

To provide evidence-based criteria for selection of patients in which the use of forceps or vacuum extractor would be appropriate and in which there will be a high chance of success. The indications and prerequisites for vacuum extraction and forceps deliveries are the same.

### **Recommendation:**

The following selection criteria and indications for use of either forceps or vacuum extractor will be documented in the medical record and thoroughly explained to the patient.

- I. Patient selection –
  - A. The fetal head must be engaged
  - B. The cervix must be fully dilated
  - C. Membranes must be ruptured
  - D. The exact position of the head should be determined
  - E. The type of pelvis should be known
  - F. Appropriate anesthesia should be in effect
  - G. Estimated gestational age of 34 weeks or greater
  - H. Personnel and facilities readily available to perform a cesarean section in the event the operative vaginal delivery is unsuccessful.
  - I. Qualified personnel available for immediate care of the newborn.
  
- II. Indications for use: No one indication for operative vaginal delivery is absolute.
  - A. Prolonged second stage
    1. Nulliparous women: lack of continuing progress for 3 hours with regional anesthesia or 2 hours without regional anesthesia
    2. Multiparous women: lack of continuing progress for 2 hours with regional anesthesia or 1 hour without regional anesthesia
  - B. Suspicion of immediate or potential fetal compromise
    1. Non-reassuring fetal heart rate tracings
  - C. Shortening of the second stage for maternal benefit
    1. Maternal exhaustion
    2. Bleeding
    3. Women with cardiac or pulmonary disease, history of spontaneous pneumothorax or detached retina in which bearing down is contraindicated.
  
- III. Contraindications –
  - A. Face or breech presentations
  - B. Suspected CPD
  - C. Unengaged fetal head
  - D. Situations in which the chance of success is very low
  - E. Pregnancies before 34 weeks gestation
  - F. Fetus with a known bone demineralization condition (osteogenesis imperfecta), a bleeding disorder (alloimmune thrombocytopenia, hemophilia or Von Willebrand's disease).

References: ACOG Practice Bulletin # 17, June 2000, Operative Vaginal Delivery; Dennen's Forceps Deliveries, fourth edition, 2001; Precis Obstetrics, second edition, 2000; Handbook of Vacuum Extraction in Obstetric Practice; Aldo Vacca