

BREECH PRESENTATION: PRINCIPLES OF MANAGEMENT

1. INTRODUCTION

- A. **Incidence** = 3% to 4% of term pregnancies
- B. **Incidence of fetal anomalies** = 6.3 %
- C. **Mortality** = Up to 25%
- D. **Associated complications** include preterm premature rupture of membranes, placenta previa, prolapsed umbilical cord, entrapment of fetal head, and fetal trauma.

111. ANTEPARTUM MANAGEMENT

A. **Spontaneous rotation** during the last 4 to 6 weeks is rare.

B. **External Cephalic Version**

1. Should be carried out in labor and delivery after 36-37 weeks
2. Ultrasound to assess fetal position and rule out congenital anomalies and placenta previa.
3. A reactive NST should precede the maneuver.
4. Anesthesia consult for possible cesarean section for fetal distress.
5. Intravenous access.
6. Tocolytic, usually terbutaline 0.25 mg subcutaneously.
7. May give a narcotic or anxiolytic to calm the patient.
8. Trendelenberg may help dislodge the breech from behind the maternal symphysis pubis.
9. The operator then insinuates his/her hand between the fetal breech and the maternal symphysis pubis.
10. When the breech is dislodged from the pelvis, the fetal head is guided in a forward or backward roll toward the maternal pelvis while the breech is guided toward the fundus.
11. An assistant intermittently follows the progress of the procedure along with fetal heart rate using sonography.
12. If the original attempt (forward roll) is unsuccessful an alternative approach can be attempted (back flip).
13. Abandon ECV if there is maternal intolerance or evidence of nonreassuring fetal heart rate abnormalities.

14. A reactive NST should be obtained after the procedure.

C. **Contraindications to External Cephalic Version**

1. Indicated cesarean delivery
 - a. Placenta previa
 - b. Contracted pelvis

2. Indicated vaginal delivery
 - a. Fetal death
 - b. Severe congenital malformation (e.g., anencephaly)
 3. Fetal compromise
 - a. Abruptio
 - b. Nonreassuring fetal heart rate tracing
 - c. Oligohydramnios
- D. Complications of ECV*
1. Fetomaternal hemorrhage up to 6%. Women that are Rh negative should receive rhogam.
 2. Fetal heart rate abnormalities
 3. Rare complications include premature rupture of membranes, placental abruption, amniotic fluid embolism, and unexplained fetal death.
- E. Plan for Delivery After ECV*
1. Successful
 - a. If reassuring fetal heart rate pattern for one hour then discharge home. Follow-up in clinic in one week.
 - b. If there is an urgent need for delivery (e.g., preeclampsia) then proceed with induction of labor.
 2. Unsuccessful ECV
 - a. If there is no evidence of fetal compromise, no urgent need for delivery, and < 39 weeks, then discharge home with follow-up in one week.
 - b. If ≥ 39 weeks you may proceed with cesarean section or discharge home with expectant management.

111. INTRAPARTUM MANAGEMENT

- A. **Ultrasound** to rule out placenta previa, congenital malformation, estimated fetal weight, type of breech, and position of fetal head.
- B. **Clinical or X-Ray Pelvimetry**
 1. Inlet
 - a. Transverse diameter ≥ 11.5 cm
 - b. Anteroposterior diameter > 10.5 cm
 2. Midpelvis
 - a. Transverse ≥ 10.0 cm
 - b. Anteroposterior ≥ 11.5 cm
- C. **Indications for Cesarean Section for Breech Presentation**
 1. Fetal weight ≤ 2500 or ≥ 3800 gm

2. Hyperextended fetal head
3. Placenta previa or abruption
4. Abnormal clinical pelvimetry
5. Suspected fetal jeopardy
6. Oligohydramnios
7. Footling or complete breech
8. Zatuchni-Andros score < 4
9. Absence of expertise in breech vaginal deliveries
10. Secondary arrest of labor.

D. Requirements for Vaginal Breech Delivery

1. EFW \geq 2500 gm and < 3800 gm
2. Frank breech presentation
3. Adequate pelvimetry
4. Flexed fetal head
5. Continuous electronic fetal monitoring
6. Zatuchni-Andros score \geq 4
7. Capability for rapid cesarean section
8. Absence of fetal or maternal distress
9. Good labor progress
10. Availability of experienced attendants.

E. Zatuchni-Andros Score

Points Scored on
Presentation in Labor

Factor	0	1	2
Parity	Gravida 1	Multipara	
Gestational age (wk)		39	38 37
Estimated weight (lb)		8	7-8 7
Previous breech	None	1	2 or more
Dilatation (cm)	2	3	> 4
Station	> - 3 or more		-2 <-1

