Assisted Delivery
Aims

- To recognise when it is necessary to assist delivery using vacuum (ventouse) extraction (or forceps)
- To practise the use of vacuum (ventouse) and forceps extraction
- To achieve competence in those skills
- To consider indication for forceps delivery
Vacuum Extraction

✅ Conditions necessary

✅ Pre procedure

✅ Procedure

✅ Post procedure
Conditions necessary

- Indication present
- Must have the required competence
- Informed consent/discussion
- Cephalic presentation
- Cervix fully dilated
- Fetal head not palpable above symphysis pubis
Pre-procedure: Preparation

- Use antiseptic hand rub or soap and water, dry with sterile cloth and put on gloves
- Drape
- Clean vulva with antiseptic
- Catheterise
- Local anaesthetic infiltration should episiotomy be needed
Pre-procedure: Assembly

• Choose apparatus
  – Kiwi : Hard / Soft
  – Malmstrom :Large / Medium / Small

• Check apparatus
  – Functioning?
  – Familiar?

• Check suction on gloved hand
Procedure: Application

✔ Assess position of fetal head by feeling sagital suture line and fontanelles

✔ Identify posterior fontanelle
Procedure: Application

✔ Apply largest possible cup

✔ Place centre of cup as far posterior as possible
Procedure: Application

- Check application
- Check no maternal soft tissue in rim of cup
Procedure: Application

- ✓ create a vacuum of 0.2kg/cm² (Yellow)
- ✓ check application of cup
- ✓ Increase vacuum to 0.8kg/cm² (Green)
- ✓ check application of cup
- ✓ start traction in line of pelvic axis and perpendicular to cup
Procedure : Traction

- With each contraction ask the mother to push

- Place finger on scalp next to cup to assess descent and potential slippage
Procedure: Traction

- Between contractions check FH and application of cup
- Do not pull if no contraction
- Episiotomy if needed
- Continue pulls for maximum of 30 minutes
Procedure: Action

• When head delivered release the vacuum and remove cup
If in doubt

Consider a trial of ventouse in theatre
Failed Vacuum Extraction

• **Classify as ‘failed’ if**
  – Fetal head does not advance with each pull
  – Fetus undelivered after three pulls or after 30 minutes
  – Cup slips off the head twice at proper direction of pull with maximum negative pressure

• **Perform Caesarean Section**
Complications

Maternal

- Lower genital tract injuries

Fetal

- Cephalohematoma
- Neonatal jaundice
Post-procedure

- Repair episiotomy / tear
- Write up procedure
- Observe baby for complications (12-24hrs)
- Neonatal review where available
Forceps vs ventouse

Both can be used to apply traction to the baby’s head

But the ventouse has the advantages of:
1. Can improve flexion
2. Allows rotation
3. Has a built in safety mechanism
Use of Obstetric Forceps

Can consider forceps:

✓ for HIV +ve patients
✓ after coming head of the breech
✓ speed for prolapsed cord
✓ at CS for high head
RECAP

✓ Indications for Assisted Vaginal delivery
✓ Use of Vacuum
  ▪ Pre requisite
  ▪ Pre-procedure
  ▪ Equipment handling
  ▪ Procedure
✓ Failed Vacuum Extraction
Where expert neonatal review not available

- 2-4 times daily head circumference measurement
- Serial PCV check, Serum Bilirubin

Cephalo heamatoma spontaneously resolves within a few days!