Information Sheet for Assisted Vaginal Delivery

In our hospital, "Assisted Vaginal Delivery" includes vacuum extraction, forceps delivery and episiotomy.

The aim of "Assisted Vaginal Delivery" is to facilitate a smooth and safe delivery. The doctors and midwives will apply whichever is necessary according to your needs in order to achieve a safe vaginal birth. The doctors and midwives would provide information and support to you throughout the delivery.

Episiotomy

Episiotomy is a technique employed to facilitate vaginal delivery of baby by reducing the soft tissue resistance encountered during the delivery process.

It enlarges the birth opening to minimize damage to tissues at the vagina and perineum. It may be employed to prepare for assisted vaginal delivery or to facilitate the use of maneuvers during difficult delivery. It may not be necessary if the perineum is lax or the baby is small.

Nature

Episiotomy is a surgical cut at the posterior perineum, usually done with scissors on one side, mostly at the left posterior part of the perineum. Sometimes, a right side, or mid-perineal or cut on both sides are considered.

Risk and complications

- Bleeding
- Collection of blood in the perineal tissue (haematoma), may require surgical drainage and repair
- Pain over perineum (10% requires analgesic for pain relief)
- Infection (2 – 3%), usually mild, may require regular wound cleansing and antibiotics
- Gapping of wound requiring re-suturing (1%), may need general anaesthesia

Aftercare

Episiotomy will be repaired in layers after delivery with suture. Clean your perineum with water after passing urine or bowel opening and change sanitary pad regularly to reduce the chance of infection. Usually the sutures will be absorbed by the body. Exposure of sutures during the course of healing is common. No intervention is usually needed. Daily activities or postnatal exercise would not affect the healing process. On the contrary, appropriate exercise would increase the blood circulation and help the healing of the wound.

Vacuum Extraction

Vacuum extraction is the use of a vacuum device to assist the delivery of baby and shorten the birth process after the cervix is fully or almost fully dilated.

Figure 1- An example of vacuum device

Indications

- Prolonged second stage of labour (the time from the cervix fully dilated to delivery of baby)
- Fetal distress, when immediate delivery is preferable
- In medical conditions when excessive maternal effort is preferably avoided during the second stage of labour, eg. mother with severe heart disease, mother with very high blood pressure etc

Procedure

- Provide pain relief by local anaesthesia (injection inside vagina) or regional analgesic injection into your back (epidural)
- Empty the urinary bladder
- Apply the vacuum cup to baby's head and build up a small negative pressure inside the cup by vacuum pump, such that the cup becomes firmly applied to baby's head
- Apply traction during uterine contractions, together with maternal effort, to deliver baby's head, followed by the baby's body

Risk and complications

Risk to mother

- Perineal tear including injury to the anal sphincters (affecting up to 4%), if severe, may require repair in operation theatre. This may have possible long term complications of faecal incontinence and may affect future mode of deliveries.
- Excessive bleeding
- Voiding problem or leaking urine. Physiotherapy may help.
- Failure of vacuum extraction: The vacuum cup may be detached from the baby's head. Depending on situation, re-application may be carried out, or other procedures e.g. Forceps delivery, Caesarean section, may be necessary.

Risk to baby

- Chignon. It is a swelling on baby's scalp. It is related to suction from the vacuum cup and does not harm the baby. It usually disappears within 24-48 hours
- Scalp injury
- Neonatal jaundice (5-15 in every 100 babies)
- Bleeding in the scalp causes a bruise in babies' head i.e. cephalohematoma (1-12 in every 100 babies), disappear with time
- Skull fracture (1-8 in every 1000 babies)
- Bleeding in the brain (0.5 to 1.5 in every 1000 babies)
- Incidence of death and severe injury is low (0.1 – 3 babies in every 1000 extraction procedures)

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Other procedures that may be necessary

- Manual rotation prior to vacuum extraction
- Episiotomy
- Repair of perineal tear
- Blood transfusion
- Slip cup: the vacuum cup may be detached from the baby's head. Depending on situation, re-application or other procedures may be carried out.

Alternative methods of delivery

- Forceps delivery
- Caesarean section. Caesarean section in the late stage of labour is more complex than a planned operation, usually the baby's head is deeply engaged in the pelvis and may increase the risk to both you and your baby.

Forceps delivery

Forceps delivery is the use of a pair of forceps to assist in the delivery of baby and shorten the birth process after the cervix is fully dilated.

Figure 2- An example of a pair of forceps

Indications

- Prolonged second stage of labour (the time from cervix fully dilated to delivery of baby)
- Fetal distress, when immediate delivery is preferable
- In medical conditions when excessive maternal effort is preferably avoided during the second stage of labour, eg. mother with severe heart disease, mother with very high blood pressure etc.

Procedure

- Provide pain relief by local anaesthesia (injection inside vagina) or regional analgesic injection into your back (epidural)
- Empty the urinary bladder
- Position the steel blades of forceps to both sides of baby's head
- Apply traction during uterine contractions, together with maternal effort, to deliver baby's head
- Deliver baby's body as in normal delivery

Risks and complications

Risk to mother

- Perineal tear including injury to the anal sphincters (affecting 8-12%) or excessive vaginal or vulval tear (20%). May require repair in operation theatre. This may have possible long term complications of faecal incontinence and may affect future mode of deliveries.
- Excessive bleeding
- Voiding problem or leaking urine. Physiotherapy may help.
- Failure of forceps delivery: It is because the forceps blades are unable to be locked or the baby is not descending progressively with tractions. Resort to other procedures may be required, e.g. Vacuum extraction, Caesarean section.

Risk to baby

- Forceps mark on face, usually disappear spontaneously within 24-48 hours
- Neonatal jaundice (5-15 in every 100 babies)
- Scalp injury or bleeding in the scalp
- Injury to facial nerve (0.5 – 1 per 100 babies), usually resolve in 2-3 weeks
- Injury to face or eye
- Skull fracture (1-8 in every 1000 babies)
- Bleeding in the brain (0.5 to 1.5 in every 1000 babies)
- Incidence of death and severe injury is low (0.1 – 3 cases per 1000 procedures)

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Other procedures that may be necessary

- Manual rotation prior to forceps delivery
- Episiotomy
- Repair of perineal tear
- Blood transfusion
- Caesarean section

Alternative methods of delivery

- Vacuum extraction
- Caesarean section. Caesarean section in the late stage of labour is more complex than a planned operation, usually the baby's head is deeply engaged in the pelvis and may increase the risk to both you and your baby.

I acknowledge that the above information concerning my operation / procedure have been explained to me and discussed with me and I fully understand them. I have been given opportunities to ask questions pertinent to my condition and management and satisfactory answers have been provided by medical or nursing staff.

Signature: ________________________

Date: ___________________________